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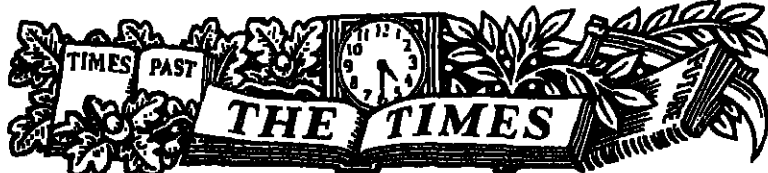
## NEXT WEEK

Dreyfus and after: Douglas Johnson looks at anti-semitism in France

New disciplines: medical law and ethics

Robert Wokler on the history of political science

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## Flaws in the fightback

Why has higher education's fight back against the cuts of the last four years not been more effective? Or even visible? This is the question that has been raised in *The Guardian* over the past few weeks, in two of the paper's editor which they provoked. The first leader asked the question. Mr Peter Brooke, the under secretary for higher education, attempted to answer it by suggesting that the cuts had not after all been so very bad. Most of the subsequent correspondents strongly disagreed, a few in language with a whiff of *Private Eye*'s Dave Spart, most simply expressing their deep sense of the disregard and lack of appreciation which the present Government has shown to higher education since the day it entered office. Their sense of anger, alienation and demoralization was underlined in a second *Guardian* leader which rebuked Mr Brooke for both his unconvincing belittling of the cuts and his apparent indifference to the crisis of morale through which universities, polytechnics and colleges have been passing.

Altogether it made an interesting and revealing exchange of views. But the original question—why the higher education dog has not barked more loudly—is perhaps no nearer a satisfactory answer. Mr Brooke's answer, that the cuts have not been as bad as many people imagine, will not do. The facts of the cuts cannot be denied. Reducing public expenditure is central to the strategy of this Government. If the Department of Education and Science had not cut higher education, the Prime Minister and the Chancellor

of the Exchequer would have been introducing special programmes like the restructuring "new blood", and information technology funds. It may even be that when the final public expenditure sums are done the actual savings achieved by the Government's "savage" policy will be seen to be quite slight. But that would be a condemnation not a defence of present policies. For it is perfectly possible to save very little but cut very deep. The bulk of the reduced money has gone to pay off university lecturers who could have been retained much more profitably.

Nor can Mr Brooke really claim credit for maintaining, just, the Robbins principle of access. It was not the intention of the Government that the polytechnics and colleges should soak up the students displaced by the university cuts. Indeed they were very much opposed to the increase in the

number of students in the non-university sector after 1981. More recently the Government has adopted a more permissive policy on access, partly because the Treasury now permits to be set against more profitable expenditure (itself a counsel of despair because it so clearly demonstrates the Treasury's conviction that mass unemployment is now a semi-permanent feature of British life), partly because the present pressure for places in higher education is expected to be a transitory phenomenon as a result of coming demographic decline, and partly because restricting student access is seen in these less buoyant Tory days as a potential vote loser.

The second answer, that higher education's fight back has been effective if not always visible, is more convincing but still not an entirely adequate explanation. Certainly the University Grants Committee has been successful in clawing back the cuts by means of the special programmes that have just been described. Certainly the controversy provoked by the UGC's 1981 distribution of the cuts has frightened the Government off further dramatic cuts: what higher education has to fear from Mrs Thatcher's second Government is gradual attrition not sweeping blitzkrieg. Certainly the Social Science Research Council has been successfully defended, although most of the credit should be given to Lord Rothschild and William Wadsworth. Certainly the National Advisory Body was skilfully used as a powerful lobby to extract more money from a reluctant DES in its autumn.

But the real reasons must lie deeper. First, the absence of solidarity cannot simply be explained by tactical disunity. Rather it may reflect a fundamental disagreement about values and priorities. Too many people in higher education have agreed with some of the cuts. Many in traditional universities shed no tears over the treatment of the

four years. There has been a puzzling lack of bite. Why? Part of the reason is a simple lack of unity. The UGC, the vice chancellors' committee, the polytechnic directors, the NAB, the trade unions all have a broadly convergent interest in resisting the worst cuts. But far from working as a team, they have often squabbled among themselves. The defence of the National Health Service may have been more successful because its constituent interests showed greater solidarity, from consultants to porters.

But the real reasons must lie deeper. First, the absence of solidarity cannot simply be explained by tactical disunity. Rather it may reflect a fundamental disagreement about values and priorities. Too many people in higher education have agreed with some of the cuts. Many in traditional universities shed no tears over the treatment of the

## A cool look at science parks

Science parks begin to look uncomfortably like developments with a great future behind them. The study by two Cambridge planners reported "last week shows that the city's own science park has neither created jobs nor fostered strong research links between tenants, firms and academic departments. This will be unwelcome news for the many other universities now undertaking similar schemes."

While a single study will do little to reduce the momentum of an idea backed by powerful coalitions in many British regions, it should make higher education administrators look hard at what they can expect from their high-tech Warwick. University, where Mrs Thatcher opened the first science park building last week, have a sophisticated appreciation of what it takes to nurture a cluster of companies which will be greater than the sum of its parts. Others are making artistic impressions with good intentions and hoping for the best.

Higher education serves industry in three ways: maintaining a supply of

trained people; acting as a source of new ideas and new technologies; and, increasingly, offering a home for new companies on campus. Science parks are meant to boost the third part of the relationship. But many British developments are inversions of the American models from which they take their inspiration. In the famous Boston or California's Silicon Valley universities simply gave a helping hand to the growth of firms already under way. Even so, British business should be wary of the president of the Massachusetts Institute of Technology, Karl Compton, personally underwrote bank loans to many route 128 companies just after the war.

In Britain, many science parks are designed to attract firms from outside rather than offer accommodation for home-grown entrepreneurs. And this is already having a bad effect. The Thames valley and parts of Scotland, where companies seem to favour with regional development agencies and local authorities, "giving" with one

technological universities; in the universities at large there was, and is, a strong subterranean conviction that the non-university sector should be cut down to size; in the polytechnics some are tempted by the possibility that the cuts may bring about the long desired concentration (goodbye, colleges); many scientists and engineers have none too discreetly welcomed the current discrimination against the social sciences. All these, and others, are big cracks in the solidarity of higher education. It is naive, even immature, to pretend that they can be papered over by the rhetoric of resistance.

A second reason is that too much time is spent attacking the wrong targets, the surrogate enemies like the UGC and the NAB. If a tenth of the energy expended on condemning the UGC between 1981 and 1983 had been spent on campaigning against the public expenditure decisions of the Government in the winter of 1980/81 which the UGC had to accept—or to abdicate—a more effective resistance might have been undertaken. But it all came too late. The same phenomenon can now be observed in the polytechnics and colleges. Many people are only just waking up to the fact that some unpleasant things may be about to happen at the North East London Polytechnic or the West Midlands College of Higher Education. When they have worked out what NAB stands for, they may even find a convenient scapegoat.

The sad result is that the Government, the real perpetrator of the cuts, is able to avoid much of the blame. Mr Brooke is able to claim that not many people protested when the effective failure on the part of higher education to pin the blame for the cuts where it truly belongs is not simply a culpable lack of anticipation. It also reflects a fustianousness in the face of politics, a certain politics with a capital "P".

Many people in higher education pursue the hopeless illusion that the colleges can be treated on its own. They want the cuts to be resisted but in a political vacuum. But higher education policy cannot be abstracted from the ordinary process of politics. It is tied up with privatization and cruise missiles and the Common Market. It comes as part of rival packages and the vain attempt to deny or fudge this central fact, the instinctive commitment to an apolitical and so anaemic defence, really explains any lack of bite in higher education's fight back against the cuts.

another to put together the most attractive package for highly mobile businesses. It is a competition someone must lose.

Even though many developments are still barely under way, there is enough experience of science parks in Britain to sustain two conclusions. First, a separate site for fledgling companies is not essential for a university seeking industrial links. The absence of real estate in South Kensington does not seem to have inhibited Imperial College, London, for example, from working closely with a large number of firms.

Second, if there is to be a science park, proximity to a university is neither a necessary nor a sufficient condition for its success. It can help, but other economic and geographic factors are probably more important. Here, one of Britain's oldest and most prosperous science parks—in north London—repays close study. don't a few empty-based science parks and build a new university in War-

Laurie Taylor



Is Professor Bracken there, please? Well, I'm afraid he's rather dead up the moment with the UGC question. Who's that, Rosemary? Someone called Simon Gladhand, BBC television. Probe. Ah, hello, Mr Gladhand, Professor Bracken speaking. Professor Bracken! I understand you're very busy. Won't keep you a second. Not at all, Mr Gladhand. I'm a great admirer of your programme. Probe, isn't it? Yes, thought so. Glad admirer.

Oh good. I think we're all quite pleased with the way things are going. Did you see our piece on video north last week? No, I'm afraid I missed that one. Pity. Very powerful images. Anybody I think we've got another promising item this week on the new psychology chair at Edinburgh. Ah yes. The new chair. Absolutely fascinating. I wondered if you had any views on the subject.

Yes indeed. Plenty of views. Oh yes, shortage of views. But what are they? Well, it seems to me, and I'm speaking quite frankly here, that there's a great deal of... You see, we're rather looking for leading psychologists who would definitely against it. Against what?

Well, someone who believes that it's a waste of money. It certainly is a great deal of money... Who believes the university is in a position to resist further restrictions on free flow of information likely to be imposed by the American administration. There is that perspective in it. There's a... Someone who regards the subject of parapsychology as complete nonsense and total hocus-fokus. Well, now you press me, I have to say there are some genuine doubts...

You see, we've got this other psychologist — another professor who'll be saying that it's all absolutely excellent and there's a great deal and we're on the edge of breakthrough and there should be a lot more so chairs. I must say I find that difficult to follow with.

Oh yes. In fact, I feel most strongly the universities should always take a critical view of new disciplinary developments.

Yes? And must not on the whole be diverted into the pursuit of the fashionable or metaphysical or downright mystical. Excellent. That would certainly fit in the way we've been thinking about the studio debate.

To paraphrase Dean Inge, mere speculation must never be allowed to mislead the philosophical task of the University.

Just what we're looking for. Really good television. I mean, whatever next? Just because famous people choose to leave their money to quite idiosyncratic causes, are we soon to have the academic landscape disfigured with the Henry Ford Chair of anti-History, the Paine Strong Chair of Platitudinarian Philosophy?

First-rate. That'll make for a splendid first half. And then we can go straight into the wax pops. Just one more thing, Professor Bracken.

What's that? No large spots on your tie or suit if you can manage it. We've got a nice solid background for the whole piece and we don't want you to merge with the background. Well, cheers for now, Professor. Cheers for now, Simon.

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## London plans permanent board

by Karen Gold

A permanent higher education board is planned for inner London. It would be responsible for tailoring academic, staffing and spending plans to Inner London Education Authority policies and polytechnics and colleges would be answerable to it. The board is recommended in a paper published today by ILEA education officer Mr William Stubbs. It could be established and looking at 1985/86 academic plans before the end of this year. It would meet once a term, and colleges and polytechnics would be invited to appear before it annually.

Members of the ILEA see the board as a way of coordinating advanced and non-advanced further education and of increasing the pressure, particularly on the polytechnics, to improve access for minority students.

Mr Neil Fletcher, chairman of the further and higher education subcommittee which will debate the paper on March 28, said the polytechnics had to develop better relationships with the colleges around them. "When they go through the annual exercise of going through their books and reviewing their work

and looking at their proposals for next year, we will be able to turn the screws somewhat more effectively than we have done in the past," he said.

The board would comprise authority and co-opted members—probably institutional, inspectorate and union representatives. It is not expected to include outside bodies, but the National Advisory Body and the University Grants Committee might be represented on one of the three groups recommended to work the board.

The groups are one to provide subject expertise perhaps later developing a partnership in validation with the Council for National Academic Awards; one to look at geographical cooperation in five areas each centred on a polytechnic; and another on transboundary developments, particularly with London University.

The paper also recommends the establishment of a special committee to coordinate teacher training throughout inner London. It would oversee in-service and access courses and resources, talk to national and voluntary colleges and universities and make London teacher training "complementary rather than competitive".

## How American security hits British research

by Jon Turney  
Science Correspondent

New American security measures are beginning to hamper British researchers in fields the US regards as militarily important, including advanced computer research and materials science. The Committee of Vice Chancellors and Principals and the Royal Society have both backed efforts by the US National Academy of Sciences to resist further restrictions on free flow of information likely to be imposed by the American administration.

Mr Brian Taylor, secretary of the CVCP, has written to the science and technology office of the British Embassy in Washington detailing academics' fears about the effects of US Department of Defense moves to restrict access to some unclassified science research. The letter, also sent to the British Ministry of Defence and the Foreign Office, details responses to the new proposals from individual vice chancellors.

The responses include suggestions that the proposed controls would impede research on defence strategies, that they would lead to British univer-

sities refusing research contracts from US defence agencies, and that major research institutions in this country like the Central Electricity Generating Board, or the UK Atomic Energy Authority might make special arrangements with their US counterparts which would bar access to university researchers.

The fears are summed up by the argument that the tighter controls now being imposed by the Reagan administration, "would place an ever widening circle of research beyond public scrutiny and outside the reach of legitimate academic investigation and discussion".

The vice chancellors' position is underlined by the effect existing US security efforts are already having in some fields. Dr Anthony Kelly, vice chancellor of Surrey University said this week that some areas of materials science were subject to restrictions preventing British researchers gaining access to latest US research results. "If materials are placed on the US Munitions List, details of their preparation become restricted", he said.

Mr Mike Bader, a lecturer at Surrey, said there had been "a complete clampdown" on work in his own speciality of matrix metal composites. This even extended to restricting a short course at the University of California at Los Angeles to American citizens. "This is especially annoying because I myself run a course at UCLA with an American colleague", he said.

Mr Bader and others in the field also report experience of papers withdrawn and closed sessions at American conferences, and highly selective access to American laboratories. "I've never met anyone who is in favour of these measures, either in academia or industry, but the policy makers are very sensitive about security", Mr Bader said.

US sensitivity also extends to supply of advanced computer software, especially in artificial intelligence research, lately high on the agenda of the US Defense Advanced Research Projects Agency. Administrators and researchers involved in Britain's own Alvey Programme for computer research have experienced denial of access to some software packages developed in the US and long delays in delivery when export is possible.

This is why the Alvey group stresses the importance of software development in Britain, particularly in languages like Prolog where Britain has the edge on the US.

The Royal Society is also concerned about the general problem of information transfer, and has been in informal contact with the US National Academy of Sciences on the issue.



The Home Secretary Mr Leon Brittan receives a rag week reception from students Christine Crooks (right) and Sara Field at King's College, London. Mr Brittan was addressing a meeting of Conservative students at the college.

## Extension for unit

by Maggie Richards

A further three years lease of life and a budget for the period totalling nearly £6m have been awarded to the Adult Literacy and Basic Skills Unit.

And in another area of adult education the Department of Education and Science is to fund a three year programme aimed at improving educational opportunities for the unemployed, at a cost of £2.5m.



# Letters to the editor

## No simple formula for library funding

Sir, - The pursuit of a formula for funding the library has been the philosopher's stone of administrators and library committees for generations; and like the philosopher's stone the search seems doomed to failure. Devising a simple formula (A question of bookkeeping, *THES*, February 17) to describe such a complex area seems even less likely to succeed. Even if a formula is found to satisfy the local needs of one institution there is no evidence to suggest that it can then be applied universally to meet the quite different needs of other institutions.

The approach described has at least three major flaws: it confuses use with need; it assumes equality of need; it assumes uniform patterns of use. The formula is in part based on the fact that use figures show non-science students borrow three times as many books as science students; but that is a very different proposition from saying that they need three times as many books. What if science students consult two books for every one they borrow? One can think of other reasons why use and need are not the same. Lack of time, lack of opportunity, current teaching methods and so on. And why quite arbitrarily suggest one journal for each member of staff? Why not five or 2.4?

Need is never equal. The core collection of a small department can be as large as that of a large department.

Some departments are moribund while others flourish full of new blood posts and constantly changing courses. Some departments are biased to teaching others to research. Some subjects have high publication rates others low - and this changes as they move in and out of fashion; some departments need mainly American books others mainly East European, and a list of British book prices is a fairly blunt instrument to refine such a distinction.

Some subjects will acquire much of their needed material by gift or exchange; should they then get the same share of the budget? How will such a formula cater for perhaps extensive commitments to outside users? Teaching methods in different departments within the same faculty make quite different demands on the library. This list of complications can be extended almost endlessly to show that library resource allocation is not a simple matter.

The final flaw is to assume that groups use and even need the library uniformly and that simple numeric weighting is valid. But some individuals need the library more than others. Bench collections, private collections and even other libraries may be the most appropriate source of information for some.

Any attempt to allocate resources to the library is faced with a minefield of



Consulting the library catalogue at the New University of Ulster.

contradictory and complex needs, but if we must have a formula it is difficult to see why we should not simply accept the recommendation of the Parry report (University Grants Committee: *Report of the Committee on Libraries* 1987) that universities should allocate 6 per cent of their expenditure to the library "not a large proportion in relation to the significance of the

library within the university". If this were done, libraries would have no grounds for complaint and could sensibly relate their acquisitions to the level of activity in the university.

Yours faithfully,  
DEREK G. LAW  
Sub-librarian,  
University of Edinburgh.

## Philosophical approach

Sir, - I was interested to read Robin Thornbury's letter on the proposed Associated Examining Board philosophy A level (*THES*, February 10), and in particular his question about how schools and colleges can organize to add it to their curricula.

This is certainly likely to be the focus of its difficulties in getting accepted for school and college administration will not relish what may seem to be risky experimentation with scarce resources.

Furthermore, it is probably the case that many administrators are adherents of the new technological orthodoxy in education. In this view, subjects which are not "hard" science, and preferably electronic in some way, are stigmatized as relics of the time when academic education was pervaded by a moribund Victorian complacency. From this perspective, arts subjects are sometimes seen as superfluous ornamentation, or, worse still, as a continuing institutionalization of British social divisions.

Against this, it is probably worth making a couple of points. First, cultural literacy is as much of a vocational handicap as technical literacy. As the computer industry says, "rubbish in, rubbish out". All the technical expertise in the world is useless without a clear idea of what can be done with it.

Second, the resentment felt by many "technical" people against what they see as the arrogance of traditional subjects is quite misplaced. The fact that these subjects have traditions, benefited mainly the elite of a declining system does not of itself condemn them. The malaise of traditional British education did not lie in the impracticality and innumeratecy of its products, but in the fact that it never imparted very valuable skills to anyone outside the elite.

There is nothing egalitarian about remorselessly technical vision of education. To retreat into a technological bunker will certainly do nothing to remove class divisions in education, and will probably only hasten as much-trumpeted industrial decline. On the other side, the AEB's innovative proposal for a philosophy A level, with its syllabus ranging from Plato to scientific method, will be of value precisely to those who are at present shepherded into narrowly "scientific" courses.

It is worth noting that the three-plum progress of German higher education from 1810 onwards was initiated and fuelled by philosophers: Fichte, Hegel, Schelling and others. And nobody has ever complained that Germans were ill trained in technology.

Yours sincerely,  
DR JULIAN ROBERTS  
Editor,  
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Cambridge College of Arts and Technology

**Missing link**  
Sir, - The review of *Social Policy and Social Welfare* (edited by Loney, Bawell and Clarke) by Alan Casson (*THES*, February 10) questions the failure of this reader to cover some central topics in contemporary social welfare. However, the review fails to take account of one rather important explanation for the choice of the book's contents. Both on the cover and the facing title page, it is explicitly stated that the book was designed as a reader to accompany an Open University course (D355 *Social Policy and Social Welfare*). Most of the missing issues which the review identifies from the other set book, Ramesh Mishra's *The Welfare State in Crisis* (reviewed in the same issue).

It would be unreasonable to ask for a review of the whole course, but the recognition of the implications of the book's being "part of an integrated teaching system" would have been a welcome addition to the review, and might have explained much that Alan Casson found disappointing.

Yours faithfully,  
JOHN CLARKE  
Sub-Dean, Charles and Thomas Open University

## Adult cash withdrawn

Grant aid to the Educational Centres Association is to be withdrawn over a three-year period by the Department of Education and Science.

For 60 years, since its establishment with the help of Arnold Rowntree, the association has sought to encourage the widest possible participation in adult education, from students through to principals and administrators. Its funding comes almost totally from the DES.

The decision to withdraw ECA funding was announced in the House of Commons this week by Mr Peter Brooke, under secretary of state for education. The award, of £18,000 a year, will be cut back to about £7,000 next year, and completely phased out by 1988.

Mr Robin Squire, Conservative MP for Hornchurch, who raised the issue, said: "For the past 60 years or more this association has promoted adult education through student participation, also known as self-help. Is our economic plight so serious that such sums need to be cut?"

Member institutions of the ECA cover an enormous adult educational range, from university extra mural departments to small voluntary educational settlements. Through its member institutions the ECA claims to represent 400,000 students.

A meeting of the association's executive committee will take place tomorrow to discuss the DES decision. Its recommendations will be passed to the ECA annual conference.

## Police studies warning

Police studies taught as an isolated subject could be almost as dangerous as police forces isolated from the community, according to Lord Scarman.

Police studies was not a sufficiently deep academic subject to study alone, and police studies courses should not be used for training police officers, Lord Scarman told a conference organized by the Council for National Academic Awards public and social administration board.

The CNAA already validates two degree courses with a police studies component, at Manchester and Ulster polytechnics, and has applications for additional courses. The subject has a controversial history, and the CNAA is anxious to ensure that degrees in police studies attain high academic standards.

Police techniques, skills of interrogation and investigation should never be touched on in higher education, Lord Scarman said. But police studies could play a vital part in law, history, sociology and public administration courses as a component to be taken by police and non-police students.

Students and researchers should study the role of the police in the community, relationships with ethnic minorities, police powers, duties and procedures for consultation, he suggested.

## Literacy unit wins £6m

Continued from front page  
as possible putting into effect the lessons we have learned from our special projects programme over the past five years."

The unit had requested a 10 year period of operation, with a mid-term review, and a budget of £3.5m in 1985/86. Instead it will get a three year rolling programme, with budgets of £1.8m, £2m and a review in 1987, after which it is hoped to keep the unit's funding at a steady £2m a year.

Permission has been given for the unit to sponsor new projects from local education authorities and voluntary organizations, but without the injection of additional cash for which it had opened. A plea to be allowed to initiate and sponsor research has been rejected. The unit will continue to make application to the DES for research facilities.

In the area of English as a second language, where the unit had hoped the role would be broadened, further discussions are to be held. But for the immediate future, the unit has been directed to develop the literacy and numeracy skills of adults possessing a good grasp of spoken English.

The unit is likely to have a role in

## Ball calls for two-year grants

by John O'Leary

Ministers should consider reducing mandatory grants to two years, paying only fees for the remainder of courses, in order to spread student awards more widely, according to Mr Christopher Ball, chairman of the board of the National Advisory Body.

Mr Ball told the Association of Colleges in Further and Higher Education that while the details of his plan would need careful consideration, the questions of principle regarding student support had to be clearly confronted. He repeated his assertion that the current awards regulations represented the "hidden hand" of higher education policy.

"We must surely ask why those on secure security are not freely permitted to pursue their education," said Mr Ball. And he added that the needs of adult and continuing education could be met more effectively by a change in the system.

Two-year grants might encourage students to interrupt their studies to take a job, completing the course later when fees would be paid either for a

final year's full-time study or two years part-time. Others would choose to support themselves in the third year, while some would find a two-year course sufficient for their requirements. Longer grants could still be offered for particular subjects, such as medicine, teacher training or architecture.

"Such a system, which offers more control to the student customer - the consumer - would, I believe, provide a more effective planning mechanism than today's inevitably crude central planning," he said.

Mr Ball described his address to ACFHE's annual meeting as the submission he would have made to the NAB's debate on long-term strategy. He considered access to higher education the fundamental consideration and one of the public sector's special tasks to explore the limits of access without sacrificing quality.

He dubbed 1984 the year of opportunity for higher education with the parallel debates in the NAB and the University Grants Committee providing genuine opportunity to reform and redesign the system.

Although he conceded that responses to the NAB's consultative document on its long-term strategy did not support a general introduction of an exclusive initial two-year qualification, he did not write off the issue. Two-year qualifications were not hypothetical but fact for many students already, he argued.

"And public sector higher education (if not the universities as yet) has to confront the question of striking the right balance between opportunities for the three-year honours degree, on the one hand, and for a two-year course (possibly, but not necessarily, to become a pass degree), on the other," said Mr Ball.

"I believe it will be the special role of some (not a few - but not all) of our institutions in the public sector to concentrate on the provision of two-year (full-time) initial advanced courses and their longer part-time equivalents, and to link them both backwards to a variety of feeder-routes from non-advanced further education (as well as from secondary education) and forwards by credit transfer to appropriate degree courses."

## Chief Inspector queries new 14-19 initiatives

by Patricia Santinelli

The Government's Senior Chief Inspector has expressed doubt about the validity and benefit of all the new initiatives for 14 to 19-year-olds and called for an assessment.

In a review of 14 to 19 provision which posed more questions than it answers, Mr Eric Bolton said it might be that all initiatives were beneficial and that each should be judged on its own merits.

He told the Association of College Principals in London last week: "We at Her Majesty's Inspectorate should be able to assess these. But we need to know more. How do all these schemes fit together? How do young people fit in and how do you stop each reinventing the wheel?" he asked.

He added that unless there was a clear idea as to what should be set up for young people, there was a grave risk that 14 to 19 provision might become dominated by one particular initiative.

Mr Bolton's review ranged from the 16 plus exam, the broadening of A level studies, Certificate of Pre-vocational Education, the Technical Vocational Education Initiative, the Youth Training Scheme, technological changes and changes in higher education which would have an impact on schools and further education.

He pointed out that in many cases it was not clear at exactly which target group an initiative was being aimed or how it interrelated with another.

Taking the certificate of pre-vocational education or 17 plus, Mr Bolton said that the speed of events was raising tricky questions. Did the original group still exist? How would the 17 plus exam affect breadth, relevance



Mr Bolton: posed questions

and so on at 16 plus, especially if the CPVE proposed to reach below 16 plus?

"The TVEI will also have important implications for the colleges when it moves there. It is not a question of how good or bad it is but how well it aligns with other initiatives such as the CPVE," Mr Bolton said.

He added that the White Paper *Training for Jobs* was yet another initiative where a target group had not been clearly identified. There was not any indication on what young people it would impinge on, how it would relate to all the other initiatives, or for that matter craft and higher education.

"Finally taking all these examinations and initiatives, will sixth forms and tertiary colleges be able to provide these within realistic resources, or will it be only the large institutions which can cope?" Mr Bolton asked.

## Degree 'is advantage'

A third of all jobs taken by graduates in 1982 were open to applicants from any discipline, according to a study by careers advisers published yesterday.

The survey, undertaken by the Association of Graduate Careers Advisory Services, confirms the value of a degree in the employment market. It registers university graduate unemployment at 13 per cent and the polytechnic equivalent at 17 per cent. Almost half of all university graduates went straight into permanent employment in the United Kingdom and 52.5 per cent of their polytechnic counterparts did likewise.

But there was considerable disparity between the various subjects. Fewer than one third of English graduates, for example, found work in the United Kingdom, while almost three-quarters of those with degrees in business and management studies did so. The worst unemployment rate, at almost 30 per cent, was among polytechnic geography graduates.

The most popular field of work, attracting 11 per cent of all graduates going into permanent jobs, was training with chartered accountants. And, discounting engineers, 40 per cent of all graduates went into the computer, selling and financial sectors.

## Points of order in UGC debate

by Ngao Creqeur and David Jobbins

University lecturers have urged Sir Keith Joseph to intervene in the University Grants Committee's "great debate" - to ensure the responses are made public.

Mrs Diana Warwick, general secretary of the Association of University Teachers has written to the Education Secretary reminding him that he wanted an open and wide-ranging debate.

"It is alarming that the UGC believes it can 'vet' each of the responses and produce a set of proposals for you when no-one else will be able to assess whether the weight or authority given to one argument rather than another is justly based."

The UGC has already been criticised for limiting the extent and nature of the debate by the assumptions it has made about resources and student numbers. Its recommendations to you will lose further credibility if it is not prepared to continue in the open manner which you yourself determined."

Meanwhile a key factor in the university funding debate was officially corrected this week when a minister admitted he had got his facts wrong in a letter to a national newspaper.

Mr Peter Brooke, under secretary for higher education, told the Commons he had made a mistake in a letter to *The Guardian* in which he said the recurrent grant to universities had risen by almost 25 per cent between 1980/81 and 1983/84.

Last week Liberal education spokesman Mr Clement Freud was told by Mr Brooke that the true rise was about 12 per cent.

In the Commons, Mr Brooke said that Lord Flowers, chairman of the Committee of Vice Chancellors and Principals, had drawn his attention to the mistake and that he had written a letter of apology to *The Guardian*.

Mr Freud was especially critical of the Department of Education and Science's use of statistics.

"What I find both worrying and sinister is that it has taken close Parliamentary questioning to disentangle the facts from the morass of post hoc justification the DES dreams up for the Government's actions."

It was yet another debacle calling into question the use made of statistics by the DES and its ministers.

Leader, back page

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Open Tech award

The Manpower Services Commission's Open Tech has awarded Strathclyde University's business school £292,000 to fund management skills courses for companies and public organizations in Scotland.



## DON'S DIARY

## SPRING 82

Return from British Sociological Association conference on Gender and Society to find note from dean telling me that my secretary had been transferred to other duties. Demoralized and dejected, decided that the end-of-grant report I had been writing was too long anyway. Go back to reading and thinking - and dreaming about impending Alpine holiday with Waymark. Enjoy working through Linguaphone's intermediate courses in French and German for my tour.

## SUMMER

The Pennine Alps after an absence of 10 years. Very friendly group. Superb weather encourages extra excursions. Overcome with nostalgia on descent into Zermatt for the last days of the holiday. Climb 4,000 metre Breithorn, helped by lift on 100 person telecabine. A fine end to the tour. Group present me with a pair of socks.

Summer school on the Stirling campus teaching Sex Divisions and Society with five female tutors as colleagues. Very supportive - of each other. I feel isolated. Love teaching room with picture window framing the 400 metre Dumyat peak.

Letter from Waymark telling me that they had removed me from their panel of leaders because I had taken my group up the Tete Blanche (What about the Breithorn?) Quote their rubric to me: Where the wise man puts on a rope the Waymark leader turns back.

## AUTUMN

The need to write becomes irresistible. But typing is as frustrating as ever because of mistakes. I can copy with some accuracy, but when I think my fingers become spastic. I can barely understand the gibberish which appears on the paper. No secretary to produce a neat version.

Try a variety of electronic typewriters. The salesmen are charming - but they can't type. They "demonstrate" the machine by running their fingers over the keys to produce *waww/km,j,i*, then show off the machine's capability by pressing one or two keys to print *waww/km,j,i* again. They are not so good at explaining how to correct mistakes. Salesmen are happy to leave machines with me at home for a week or more. I learn how to produce perfect copy. But it becomes apparent I could get a lot more facilities for not so much money.

## WINTER

Shops whose main customers seemed to be schoolboys claim to sell word-processors, but their staff don't know anything about typing. "Does it do proportional letter spacing?" I ask. "Yes, it does right hand justification" is the reply.

How can I decide what to get without some idea of what I would be getting? It has to be an act of faith. Eventually decide on a system because of a review description - "a veritable cherry blossom from the Far East".

Wordprocessor arrives. Full screen display. Double disk drive. Dot matrix printer. I can correct, edit, revise, rewrite, store as much as I want. I am struck with awe. A machine which can perform such wonders must, I feel, be as delicate as a gas mantle. I am afraid to move the machine in case it loses the ability to carry out these magical operations.

## SPRING 83

Write end-of-grant report and send it to the SSRC. Catch up on lots of correspondence. Begin to learn a lot of the things which secretaries normally do. But the wordprocessor is better. I can start and finish job in the same session.

Write first article drawing from SSRC project. Begin to feel that I have been handicapped all my life by inability to write legibly or type accurately. I find I am using correspondence to help research and going in to the university only for mail, visits to the library and jogging with colleagues.

Write second article. New secretary becomes my sub-editor - and I learn of my spelling idiosyncrasies. I print my disk directories and wonder how a secretary could have coped with this material. My colleague who lives and works 50 miles away, impressed by my productivity, acquires the same cherry blossom.

Write third article - collaboratively with colleague. Floppy disks make the 50 mile journey most weekends. Write research proposal on word-processing. Give talk on word-processing to faculty. Get letter from university offering early retirement.

## SUMMER

Submit articles for publication. Print two double spaced copies for editor and 40 single spaced copies for comments. No time for holiday this year. But go to summer school at Brighton for two weeks of Sex Divisions and Society. Enjoy jogging on Downs and visits to natural beach. Find new field of study (quality control) with parallels to findings of my SSRC project. Get immersed in tracing diffusion of ideas from America to Japan, and wonder why they never came to Britain.

Theorize on why Japan has taken over world leadership in quality. Learn that the Japanese Union of Scientists and Engineers has been conducting correspondence courses on quality control for foremen since 1970 and getting 1,500 to 2,000 students every six months.

## AUTUMN

Write to manufacturers of cherry blossom in Tokyo. Will they give support to research requiring use of new technologies? Get grant from SSRC to evaluate database software. Start writing on quality control - collaboratively with an established authority in the area.

Learn to use new database software with an analysis of 1983 university senate elections. Plan database analysis of papers given at the first International Conference on Quality Control, Tokyo, 1989. Send advertisement to newsletter of Japanese Society for Quality Control for a co-author who can read Japanese as easily as I can read American English. Get bank loan to buy a cherry blossom for my secretary.

## WINTER

Get phone message from managing director of London office of cherry blossom manufacturers. We meet and talk about the quality of Japanese hardware and punctuality of Japanese software. He offers six month loan of up-market machine with letter quality printer.

Pre-Christmas drinks to celebrate installation of the two computers. The colour display of the loaned machine makes an impression. The secretary like the word-processing software. But there is an ominous note - neither retiring dean, nor dean elect, nor any member of the faculty administration come to the celebration.

My secretary is keen to use word-processor but there are problems. When I ask for help with revisions of draft computer marked assignment (the draft is on disk) she says that she does not think that the union (Nalco) will allow her to use the machine. She checks with the faculty admin. secretary. Admin secretary phones Nalco representative who states Nalco policy of no use of word-processors without training.

Learn that there is only one person in the university who is regarded as qualified trainer for word-processor. The new dean explains his scheme for getting approved designated trainers which he expects will be accepted by Nalco and the university. Meanwhile faculty is supporting Nalco policy.

New year brings news of savage financial cuts - university has to save £10m a year by 1986. But Sir Keith Joseph praises our vocational and technological courses.

Ray Thomas

The author is senior lecturer in economics at the Open University.

## AUT to fight salary scale

by David Jobbins

The "lottery" of the promotions procedure for university lecturers at the top of their salary scale is a main target for union negotiators in opening discussions with the employers next week.

Arguments for the replacement of the two scales of lecturer and senior lecturer by one continuous scale with an efficiency bar are to be put before the vice chancellors in the first meeting of the 1984 pay round.

Forty one per cent of all university lecturers are at the top of the basic lecturer scale (now £14,125) and the Association of University Teachers warns that unless the system is changed dramatically the percentage will continue to increase. The figure compares with 27 per cent in 1976 and 19 per cent in 1972.

AUT leaders admit that last year there was a temporary improvement in some universities with the number of promotions returning to the level of the early 1970s.

But they say that this is likely to be only a "slight and temporary amelioration" attributable to the numbers of

early retirements enforced by cuts in funding.

"Early retirements and voluntary severance will allow the promotion of about one in five of those at the top of the scale," the union says. "Worse still, these early retirements will greatly reduce the number of normal retirements over the next 10 years or so, reducing still further the tiny chance of promotion for those left on the lecturer scale."

The AUT points to the bizarre process selection committees go through each year, weighing the performance of chemist against economist or philosopher against engineer.

The standards set are inevitably incongruous. The temptation is merely to count research papers. There have been lecturers refused promotion to senior lecturers yet later in the same year appointed to chairs in their own universities.

The AUT argues that the promotion blockage cannot be cleared by adjustments of the senior junior ratio, under which the University Grants Committee insists that no more than 40

per cent of academics may be promoted posts.

A single scale with an efficiency immediately above the top of the present lecturer scale is the answer, the union claims.

It proposes agreed criteria for passing through the bar which would be to automatic promotion for lecturers who meet expected standards in teaching, research, administration or university service, or if the lecturers achieved in any one area is "standing".

"The cost of removing the blockage by this means is admitted by the union to be more expensive than the more efficient bar the cost in the first year would be only 0.33 per cent of the academic salary bill, the AUT is adding that it is prepared to consider phasing in.

In its claim the AUT says it needs 10 per cent just to restore the purchasing power of the last award with 22.9 per cent to restore 1979 purchasing power.

## Plans to axe television 'violate law'

by Olga Wojtas  
Scottish Correspondent

Aberdeen University's Association of University Teachers has claimed that a court decision to axe the television service violates both internal agreements and the Employment Protection Act.

The union made its claim at a meeting this week of the joint negotiating and consultative committee, which was then adjourned at the suggestion of a court member for the first time in its history. "It seemed to come as a bombshell to the court members," said one AUT member.

Two weeks ago, the court decided without consulting the unions or staff that the television service should be cut, leaving a small unit in the medical faculty. There would be compulsory redundancies, it added, and members who did not wish to leave the university would be redeployed.

However, the AUT maintains that the university's procedural agreement is very specific and precludes such a decision being taken without talks with the union.

The agreement states that the university authorities will negotiate on all aspects of terms and conditions of employment "before implementing alterations or major changes in established practices relating to the duties carried out by members of staff".

It adds that "such negotiations will commence at an early stage and will be completed when a final decision is about to be reached by court".

The joint committee will meet again on March 15 to decide what recommendations to put to the court in following week. The AUT's regional official, Mr David Bleiman, attended the meeting. He said: "A year ago AUT complained over the lack of consultation when the suggestion for an inquiry on a possible merger was made by the court, and AUT members heard about it through the press. Memories of that breach of procedure are still alive and it is now clear something must be done to improve things in future."

The AUT would be seeking the disclosure of information on other working parties which might be making recommendations on the future of other departments, he said.

## Unions in merger meetings

by Olga Wojtas  
Scottish Correspondent

The academic unions at Stirling University and Paisley College of Technology have begun holding joint meetings on prospective conditions of service as a merger of the two institutions becomes increasingly likely.

The Association of University Teachers and Association of Lecturers in Scottish Central Institutions are expected to produce guidelines this week on the conditions they wish to be met if a merger is to take place.

The unions are understood to be seeking university status for a merged institution, with enhanced pay and conditions for Paisley staff. Joint working parties are also poised to report on the academic implications of a merger.

The two institutions have set up working parties in arts, biological sciences, management and business studies, education, engineering, information technology, physical sciences and social sciences.

They have been asked to report by the end of this month on the relationships between specific subject areas in the two institutions, and what developments there could be in future through "increased collaboration".

This is now generally accepted to be a thinly veiled euphemism for a merger. "Anything less than a full merger wouldn't be worth all this effort," said one Paisley academic.

The reports will be considered by a small steering committee of the two principals and senior staff, and will then go to Paisley's academic board and Stirling's academic council in May.

If a merger is then found academically acceptable, the structure and financial implications of a new institution will be considered. There are likely to be difficulties since Paisley is directly run and funded by the Scottish Education Department, and Stirling is funded through the University Grants Committee.

Staff and students are amusing themselves by thinking up names for the new institution. Top of the list is the New University of Scotland, with Wallace University a close second. William Wallace, the Scottish patriot, was born near Paisley, and routed the English in the War of Independence at Stirling Bridge in 1297.

## 'Hitler' approach is out, King promises colleges

by Patricia Santinelli

Colleges and local authorities have been given a personal undertaking by the Secretary of State for Employment that the Manpower Services Commission will not be allowed to take a "jackboot Hitler" approach to dealing with the White Paper Training for Jobs.

In a plea for cooperation, Mr Tom King told the Association of Colleges in Further and Higher Education last week that he had already talked to both Mr David Young and Mr Geoffrey Holland, the chairman and director of the commission, about the challenge of their new responsibility.

"There will be a particular onus on the MSC to approach this intelligently and sensitively. I have already said I want the minimum disruption to present arrangements," Mr King stressed.

Mr King denied that the White Paper which is eventually to transfer the responsibility for a quarter of non advanced further education to the MSC was a final assault on the independence of local authorities. Nor was it intended to be a major drive towards centralism. The Area Manpower Boards would play a major role in identifying local needs.

He added that if it was made clear that education would be properly involved in appointments to MSC structures and in the organisation of AMBs, then in return he hoped for a good response from the local authorities.

"If I don't get it I shall be disappointed because the White Paper will go ahead. None of us will suffer except the young people we want to help," Mr King said.

Mr King however reiterated the

## ILEA inspectorate clears polytechnic

by Karen Gold

The Inner London Education Authority's inspectorate this week cleared the Polytechnic of North London of all the major accusations made against it last year and recommended the authority to accept the polytechnic's reply.

In a confidential report heard by the authority's further and higher education sub-committee in camera, the ILEA inspectorate said that the PNL had established itself as a leader in increasing access to higher education. It said its monitoring processes "were and still are capable of identifying any adverse consequences for a student of the procedures in operation" and that the monitoring of teaching in one of the criticized departments, sociology, was so good it should be adopted throughout the polytechnic.

The polytechnic's departments of sociology and applied social studies were criticized last year by Her Majesty's Inspectors for poor teaching, a narrowed-down curriculum and a "large tail of poor achievers" in the large proportion of students without traditional qualifications.

The ILEA inspectorate report says that at the time of the HMI visit, the

departments were running old degrees, one of which ends this year and the other in 1985, and students were preparing for exams. "The ILEA inspectors are satisfied that particular circumstances at the time - spring 1983 - were responsible for the department, as seen by the HMI, operating below the level of which they are capable."

But the report says that the polytechnic needs a structure to deal with the transition period between old and new courses, and recommends discussions with the Council for National Academic Awards on how to achieve it.

The PNL has been dogged by its reputation for unrest in the 1970s and its internal development has been impeded by the subsequent publicity, the report says. Nevertheless the inspectors say that although departmental organization works well, they were surprised that the institutional process of course monitoring had not developed further.

They criticize the polytechnic's management for poor communications with faculties, and for not devolving more power to the academic board.

## Preston gives invite to NAB

Preston Polytechnic has invited the National Advisory Body to attend its next quinquennial review by the Council for National Academic Awards in the spring of 1985.

This is thought to be the first such invitation since the NAB declared its interest in visiting institutions. According to Preston's deputy director, Dr Peter Knight, CNA officers have no objections.

Most of the discussion between the polytechnic and the CNA will be about Preston's academic plan and educational objectives. By then it will have changed its name to Lancashire.

"Discussion of student numbers until the end of the decade obviously has implications for resources and funding. It seems sensible that the major funding body should be present when this is discussed," said Dr Knight.



Leicester Polytechnic fashion student Caroline Townsend models a track-suit designed by her colleague Carol McKeown. It is one of a range expected to be manufactured by an international sportswear firm.

## Polys 'must teach first'

Polytechnics should promote and reward teaching rather than research in order to prepare their students for the world of work. Leeds Polytechnic director Dr Patrick Nutgens said in a degree day speech.

Polytechnics would never be good enough at teaching, but their reputations would depend on the effectiveness of their teaching and the consequent competence of their graduates. They would never be able to compete in scale or funding with the universities for research, he said.

But the difficulty of assessing and rewarding good teaching meant that research had become an easy way of evaluation staff. He said: "The danger for a polytechnic is this. An obsession with research can be a positive inhibitor of good teaching."

"Academics often deceive themselves into thinking that if all the university or polytechnic staff are pursuing their own research, if necessary to the exclusion of everything else, the students will be better taught. It can be true only in the sense that if the staff are doing research all the time, the students will have to educate themselves - which may not be a bad thing." The vast majority of research was done for personal qualification and advancement, he said.

## NO QUESTIONS ASKED

Higher education gives staff and students the freedom to study their chosen subject. Plus the freedom to enjoy the many work and leisure facilities available at colleges, polytechnics and universities.

No one wants undue restrictions placed upon this freedom but the problem still remains of how to prevent unauthorised outsiders from taking advantage of what's on offer.

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Keeping it in the family: Leeds Polytechnic graduates Peter Collin Jones, BA Hons economics and public policy and Barbara Anne Jones, BA Hons law. Father and daughter received their degrees from the polytechnic last week.

## NERC staff trace transfer

The Natural Environment Research Council is now set squarely against centralization of the Institute of Oceanographic Sciences at its main site in Surrey, as proposed by its director, Dr Tony Laughton.

Neither of the two outlying IOS sites, at Taunton in Somerset and Bidston on Merseyside, is now likely to be amalgamated with the central laboratory. The council is reconsidering its position on disposal of the second, recently acquired site in Surrey.

An internal NERC review group set up just before Christmas was expected to report by the end of March on the future of the Taunton and Bidston sites, with closure of Taunton and transfer of its research to Bidston or Wornley in Surrey the lead option. The council then ruled out sale of the second Surrey site, a leased building at Hambledon, near Wornley.

## Mature students want NUS support

Students at colleges, polytechnics and universities may be urged to take part in a day of action next week over a new system of grant payment to mature students.

This follows the end of the student occupation of administration offices at the Coleg Harlech adult residential college, Last Friday, the college authorities obtained an injunction against the students and were awarded £500 costs.

Now the Mature Students Union has called on the National Union of Students to organize a day of action.

## Sports Science Scholarships

Applications are invited for 2 research scholarships in the field of sports science. Relevant subject areas include medicine, physiology, biomechanics, biochemistry/nutrition, motor learning and social psychology. The scholarships attract standard research council rates and are payable from October 1984 for a period of 2 years, renewable for a third. Successful applicants are expected to register for a PhD.

Applications should be submitted by 21 May 1984. For further particulars please contact the Research Unit, The Sports Council, 10 Upper Woburn Place, London WC1N 0QR.





# St John's attacks UGC's 'false premise'

by Ngao Crequer

St John's College, Oxford has given a tough response to the University Grants Committee's questionnaire on strategy. It says: "The paper's title is false, its premises are questionable, and its values are superficial and unargued."

The college says the title "Development of a Strategy for Higher Education into the 1990s" and the claim that it invites an open debate are false because options for discussion have already been limited by the stated premises.

What is in fact being asked for, says the college, is not a strategy but merely tactics - "how and how fast" universities can shift towards technological, scientific and engineering courses and

other vocational study that the Government wants to see.

The desirability of such a shift was questionable. And it had never been a prime function of universities to give vocationally relevant training or teach technological courses, but to teach students to think independently and creatively.

"Nowhere in the document is there any reference to the value of knowledge or of thinking 'Relevance' is all. Relevance was once the short-sighted cry of a generation of students. It is regrettable that the Secretary of State should have seen fit to retrieve it in an even lower-grade form."

The paper's second premise, of a reduced demand for higher education, rested on Department of Education and Science figures already questioned and withdrawn.

There was also consistent past evidence that showed how simplistic it is to infer a falling need for student places from the simple figures of falling birthrate. Moreover new projections must show some imagination about the future, a possible broadening of the catchment area for higher education.

The questions the universities were being asked "are merely a disguised expression of the Government's overriding aim to reduce public spending. The UGC document invited the universities to 'predict' themselves out of existence."

"It should be the role of the UGC to retain its attachment to the university system and the standards of argument that system stands for, and not to let its posture, thinking and language become part of governmental and administrative expediency."

"The first place for universities and the UGC to maintain standards is in the quality of the arguments they use in discussing their own future. Judged on that principle, the UGC's present document may have grave implications but cannot be taken seriously" the college says.

The Association of University Teachers at Keele University argues that the UGC should publicize the criteria underlying its major decisions and how these are applied. It should also say when its advice is rejected.

Although the Government was fully entitled to seek to influence university policy and ensure the universities properly used state funds, "its recent direct and very specific intervention in university affairs is quite illegitimate and produces major detrimental and unintended effects."

## news

### First Lady for Natfhe

The college lecturers' union elects its first female president, Ms Whitbread, a lecturer at Loughborough, topped the poll for the incoming year president.

Ms Whitbread, 54, has no previous experience of the executive of the National Association of Teachers in Further and Higher Education (Natfhe). She currently chairs the teachers' education standing committee and race relations and women's panel. She is also a member of education policy sub-committee.

### Kelly's aye

Dr Michael Kelly, Lord Provost of Glasgow, has been elected rector of Glasgow University with a 2,590 beating his closest rival, Alan Rikhi Fulton by almost 10 votes.

The most controversial candidate, Pulestine Liberation Organisation leader Mr Yasser Arafat, was fourth place with 586 votes, followed by former Tory MP Mr Archer.

### V-cs join attack

University vice-chancellors have joined their criticisms to the attack on the plans for student travel. They have told the Department of Education the present proposals represent a great element of justice and that the flat rate proposed for all students should be higher.

### Correction

Professor Harold Hopkins, who has been appointed principal of the University of Manchester Institute of Science and Technology, has been academic for 17 years, and not as reported in last week's TIMES, as a result of a printer's error.

# Science 'on a downward slide'

by Jon Turney  
Science Correspondent

British science will slide back internationally unless more money comes through for expensive fields, Sir Hermann Bondi, chairman of the Natural Environment Research Council, has warned. He was speaking at a dinner immediately after the naming ceremony for the council's new research vessel, the RRS Charles Darwin, whose £7.25m cost underlined his point.

Sir Hermann told Mr Peter Brooke, the junior education minister, that he appreciated the Department of Education and Science's efforts in maintaining the Government science budget. But he said in comparison with other countries, "we are standing still on an escalator which is going down."

Sir Hermann said the environmental sciences, especially those needing ships and satellites, felt the pressure especially keenly. Floating laboratories like the Charles Darwin absorbed enormous resources, and the rest of the NERC fleet would soon need to be replaced.

But the costs of space were a more

serious concern. "There is no money for our oceanographers, our geologists and our ecologists to go and build instrumentation for satellites; to put even a small amount into internationally built satellites; to do anything to get the information down from satellites. All they can do is analyse and interpret information received from satellites whose instrumentation has been built with the money of others," he said.

Sir Hermann said we could not depend on the kindness of others much longer. His frustration at the current budget limits reflects the pressure being put on the NERC by the Advisory Board for the Research Councils to exploit remote sensing from satellites to the full. The ABRC will also be watching the use of the new ship, to make sure universities rather than council institutes benefit from time on board.

The RRS Darwin, now to be the flagship of the NERC's research fleet, is a combination observation platform and floating laboratory for studies in oceanography, geology, meteorology and other sciences.

This photograph of Newhaven fishwives forms part of a multimedia exhibition entitled *Travelling the Herring*, which opened at Strathclyde University's Colliers Gallery this week.

Travelling the herring was a well-known phrase to the fishwives who followed the shoals around the Scottish coast each summer to catch and pack the "silver darlings". Their life was a hard one but not without its traditions and pastimes - very different to today's mechanized fishing industry which has now replaced their world of barrels and boats.



Newhaven Fishwives.



## The true role of the polytechnic

For as long as the polytechnics have existed, it seems, it has been a standard play of those who would continue and strengthen the present controls on the polytechnics to claim that these institutions have, somehow failed in their allotted mission.

As early as 1974, Burgess and Pratt's book *Polytechnics: A Report* introduced the concept of "academic drift", while as recently as the NUS education conference in January, it was stated that "polytechnics were supposed to be different institutions serving different needs in their communities... too many polys are trying to copy universities to every way."

This "failure" lies, supposedly, in the dropping of sub-degree work, the neglect of the needs of industry and business and instead the enthusiastic provision of academically orientated courses.

In *The Sunday Times* articles on higher education last autumn, one polytechnic, Portsmouth, was classified as the most university-like. Yet a brief examination of the courses at that polytechnic shows a very un-university-like profile.

Of 92 courses offered by Portsmouth on a regular basis, 21 are sandwich courses involving placement of students outside the institution and 32 are non-degree courses and that not including DiphEs.

It follows that if Portsmouth is the most university-like polytechnic, the average polytechnic must then be very un-university-like.

Perhaps there is a genuine belief that polytechnics have not responded to incentives to become less like universities. If that belief exists, and it has been carefully fostered, it can be dispelled by the examination of reality.

One may ask, have there been incentives for polytechnics to undertake sub-degree work? Well, actually, no; rather, the existence of a mix of degree and sub-degree work has been used as an excuse to fund polytechnics at a level lower than that for institutions providing only degrees.

Then have there been incentives for polytechnics to provide short-courses for industry and business? Only if it is considered that facing the challenge of mounting such courses on a full-cost-plus basis compounded by the complex local authority financial systems is an incentive.

Perhaps there have been incentives for staff to carry out the work of industrial placements and visits for sandwich students? Well no, since most polytechnics operate conditions of service which make little or no allowance for duties other than teaching and, even where they do, the pressure of increased student-staff ratios tends to make any remuneration hypothetical.

Those who genuinely believe that the mission of the polytechnics to provide a community-orientated sector of higher education is being to some extent frustrated might profitably enquire from where that frustration originates, and how, possibly by a change of management structure, possibly by a revision of priorities in higher education, that mission can be revitalized.

Hugh Mason

The author is assistant national secretary of the Association of Polytechnic Teachers.

# Parkinson warning over violence

by David Jobbins

Mr Cecil Parkinson this week warned his former Cabinet colleagues against "sweeping generalizations" over campus violence.

"I am very anxious to fight the notion fostered by some people that a new generation of student agitators is about to burst on an unsuspecting world," said Mr Parkinson, prevented last month from speaking to Conservative students at Essex University by a violent campus demonstration.

"I have recently been to places as diverse as Oxford, the Polytechnic of the South Bank, and Bristol. Essex is the only place out of 30 to 40 where I have had any difficulties of any kind." At the weekend, Mr Nicholas Ed-

wards, Secretary of State for Wales, warned that the public would soon begin to question taxpayers' investment in the universities if the extreme left continued to drown the voices of their political opponents.

And this week Mr Robert Rhodes James, Conservative MP for Cambridge and his party's liaison officer for higher education, amplified the warning.

"At a very difficult time for higher education and its future when public support is so vital and so fragile, the sensible majority view in universities and polytechnics must prevail. If it does not the consequences could be grim for higher education."

But Mr Parkinson took issue with

suggestions that Government funding was necessary at risk. "I do not think there is sufficient evidence to justify this sort of talk. It would be a great disservice to say that the universities are wild and unruly. It is a slur on thousands of undergraduates who have never been near any trouble."

He indicated he would be prepared to accept an invitation to return to Essex to speak. The university's vice-chancellor, Dr Albert Sloman is heading a review of arrangements for visiting speakers to ensure their engagements are fulfilled without disruption. No disciplinary charges are pending against any students following the Parkinson incident but legal action to keep outsiders off university property is being explored.

## Satellite effort 'poor'

New satellite observation techniques will revolutionize the earth sciences, and offer benefits ranging from guidance for shipping to better climate modelling and earthquake prediction. But a Royal Society report this week says the British effort in this field is poorly supported and fragmented, and criticizes the research council's organization across disciplinary boundaries.

The report, on satellite geodesy, has many parallels with the House of Lords select committee report on remote sensing published last month. But where remote sensing produces data about the earth's surface, geodesy studies the underlying structure.

As with remote sensing, there are divisions between acquisition, processing and interpretation of this data - the Royal Society wants British scientists to be involved with all three.

And like the Lords committee, the Royal Society group, under Sir Robert Boyd, calls for a central coordinating committee to bridge the gaps between the Natural Environment and Science and Engineering Research Councils. They want the councils to back large-scale projects, including a recent proposal for a study of the polar ice caps costing over £10m.

The report comes when the NERC and the SERC are arguing about who should pay the running costs of two important geodetic instruments, including the satellite laser range at the Royal Greenwich Observatory. The SERC, Ministry of Defence and the Department of Trade and Industry have all agreed to contribute £50,000 a year to operate the instrument, but the NERC is reluctant to join them.

institutions and at least 200,000 staff.

In a separate foreword to the report Mr J. K. McDowell, the chairman of the college governors says that the development of Coombe Lodge is again being held up while a working party of the Association of County Councils examines the best way of settling value for money in providing the training necessary to enable further education managers to cope with much reduced resources.

"Although a small amount of money has been provided to allow the college year to be extended, overall the resources available have again been reduced in real terms this year. This continuing cutback in resources means that the college will be unable to invest in new technology and thus its training will be less effective than it could have been."

# Coombe Lodge director's farewell plea

by Patricia Santinelli

Mr Gordon Wheeler, retiring director of Coombe Lodge has attacked lack of central and local government support for the Further Education Staff College, contrasting with major expenditure in other areas in a farewell statement this week.

Mr Wheeler, who is taking early retirement, says in the college's annual report that the college receives less from public funds than the student union of a single polytechnic. In addition there is generous and expanding support for such agencies as the Further Education Unit, the Open Tech and the Manpower Services Commission.

Since 1977 when he took over as director, local authority grants to the college have been cut by 8 per cent in real terms - for 1983 this grant was £433,000 as opposed to £408,000 in

1982. Despite these strictures the college has increased its fee income by 33 per cent, its publications by 22 per cent and its other net income by 36 per cent. He writes: "It is not difficult to see the almost unashamed and unaccounted profligacy in public expenditure which abounds, while little more than lip service is paid to the work which this document reports."

He adds that the proposed changes in the organization, funding and delivery of further education makes an investment in the management training of further education staff even more urgent. Such an investment should match that already being made in the selection and management training of school heads.

It is too much to expect a staff college with a dozen academic staff to provide a service for nearly 1,000

# IPARTY LINE

## Long term view of a seven day wonder

leaner and fitter higher education system, they now seem bent on making it so lean as to be emaciated.

We need to take a longer term view of Britain's needs and priorities that goes way beyond the more immediate eye catching issues such as dental charges, or the cost of petrol.

At the heart of the problem is Britain's steady loss of competitive edge and markets abroad that has led to a loss of prosperity at home. The need to support over three million unemployed and the Government's inflexible monetarist policy has severely constrained the Government's freedom of action. The need for clearly identified priorities and long term vision has become more important than ever. Sadly, that vision seems almost completely absent from a Government which is being increasingly led by political expediency. The cuts in political leverage like education, or like health and personal social services, although underfunded for their needs, continue to achieve real increases in funding. It is not

possible to see why or where the priorities lie, nor what the Government is hoping to do to increase the demands of future decades.

The Budget should be laying the foundation stones of Britain's long term success against foreign competition both at home and abroad. That requires a major shift away from the current consumer boom which has benefited importers and exporters. It should head the words of Sir Geoffrey Howe about the 1979 consumer boom which he said "was much too good to last. There was, indeed, a big price to pay for that short term burst of prosperity. Production failed to respond to the surge in demand and imports, 47, rose sharply." That was after per cent in the year before the 1979 General Election. In the year before the 1983 General Election consumer spending rose 4.7 per cent. His words are as relevant now as they were then.

Public capital investment has collapsed 30 per cent as the Government has tried to balance its books

In the face of rapidly rising unemployment and increased welfare spending. Cutting investment in roads, hospitals, public housing and even the sewers is a sure way of storing up trouble for the future.

The need for a longer term assessment of Britain's needs and priorities will become increasingly apparent as North Sea oil begins to run out. Currently North Sea oil is worth some £10 billion per annum on our foreign exchange and saves the average household over £400 a year. The bonanza will not last forever. Some experts believe that its value will begin to fall rapidly from 1987 onwards. In other words, this Government can hope to float through to the next General Election on North Sea oil. And that means it will be under the long term pressure to start tackling the country. Not least problems like mental health have been made to a new generation under the increased investment in education and training must also be a top priority for securing Britain's future.

Ian Wrigglesworth

The author is Social Democrat MP for Stockton South.

## Technology competition hots up

Competition to attract high technology firms in the West Midlands became more acute this week with the launch of Birmingham University's new Institute of Research and Development. The region already has two university linked science parks under way, at Aston and Warwick, with a third soon to follow at Keele. But Birmingham University believes there is room for all of them.

Birmingham's vice-chancellor Professor Edward Marsland stressed that the new development was not complementary to its science park, but complementary to it. The new institute which will cost the university £600,000 for the first phase building, was not a science park, he insisted.

Many science parks were simply property developments. The institute would accommodate only firms with direct research links with the university, and there would be no large scale production on the site, provided by the City Council.

However, the institute will permit "small-scale" production, which in the biomedical field will be all firms need. And Mr Harold Blumenthal, who is on Birmingham City Council as well as the management committee of Aston science park, pointed out that Aston was also turning away companies which did not seek research links with the university.

"A bit of constructive competition may develop between the two universities, from which I hope the city will benefit," he said.

The council has been pressing Birmingham to set up a development like this for some years, following a proposal for a Birmingham University science park in the mid-1970s.

Professor Marsland said: "We have looked very carefully at the sort of development we want to have. He hoped the institute, to be built next to the main campus, would eventually contain smaller research centres in individual disciplines. The university hopes that its medical school will offer special attractions to prospective tenants, but is also talking to companies in computer software and engineering.

The first part of the building will not be open for two or three years and until then companies will be given temporary offices or laboratories in the university. Birmingham University officials suggest privately that the Aston development has been slow to get off the ground, and there is still time for another, similar scheme to be established.

The university estimates that the total building costs, spread over three phases, will run to £4m, and the final running costs of the institute will be up to £400,000 a year. They hope it will break even within three years, of reaching full size.

## Mild and sunny in the north . . .

by Olga Wojtas  
Scottish Correspondent

Delegates to the National Union of Students' Scottish conference in Ayr last weekend declared themselves unanimously opposed to the Gulf War, apartheid in South Africa and cuts in the National Health Service, but did not reveal where they stood on motherhood and apple pie.

Unanimity was the keynote of the conference, with amendments to motions rare and unsuccessful.

The only topic which sparked off serious debate was positive discrimination. Delegates rejected the option of reserving three places on the executive committee for women. They said this would discriminate against men and would be the best candidates.

They were then left to debate whether the holder of a new, additional executive post of women's officer should be elected by a women's conference.

and constituency parties three leading members of the Militant Tendency within NOLS call on the national executive to insist on adoption of proposals put forward at the last NOLS conference.

An emergency resolution passed then stated that records on which decisions about credentials were based should be open to inspection by any member of the NOLS national committee. The three, Ms Kath McDowell, Mr David Jones, and Mr David Maples claim this is the only way of removing "distrust and suspicion".

But Mr Denis says that the proposed committee exceeds the views expressed by the last conference by giving a right to see the relevant materials to any one member of a club whose credentials are challenged.

He emphatically denied refusing to

implement the conference decision, or blocking inaugural meetings at clubs seeking affiliation.

This year seems less likely to produce the degree of confrontation over challenged affiliations which characterized the 1983 conference. At its last meeting only three of almost 100 clubs were brought to the attention of the national committee - and only two remain subject to scrutiny.

For the first time in NUS elections the Socialist Students in NOLS are putting up candidates against official NOLS nominees. Three SSIN candidates are standing for part-time places.

The nominations for the NUS elections also indicated the return of the Trotskyite Socialist Workers Party to national student politics. The Socialist Workers Students Society is fielding candidates for all five full-time posts.

## . . . storms and black clouds in the south

by David Jobbins

Labour student leaders are involved in a bitter internal row on the eve of their own conference and the National Union of Students executive elections.

The leadership faces internal criticism over steps planned to avoid a repetition of last year's conference of the National Organisation of Labour Students when evidence was reported to the party's national executive of coordinated attempts to disrupt proceedings.

This year problems over delegates' credentials will not be handled by student organizer Mr John Denis. Instead it is planned to hand responsibility to a committee chaired by National Union of Public Employees official Mr Tom Sawyer.

But in an open letter to Labour clubs

and constituency parties three leading members of the Militant Tendency within NOLS call on the national executive to insist on adoption of proposals put forward at the last NOLS conference.

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## In-service teacher training 'needs local base'

The Government's advisory body on teacher training should urgently consider setting up some 20 area bases for In-Service Education and Training as well as a three-year rolling programme of funding, the University Council for the Education of Teachers says.

The UCET points out in a paper prepared for the Advisory Committee on the Supply and Education of Teachers that these are two fundamental and urgent aspects of moving towards a responsive INSET system.

"If teacher training institutions are to respond quickly and appropriately across the INSET spectrum, a mechanism must be devised which brings together the schools, teachers' centres, local authorities and providing institutions within an area large enough to generate resources but small enough to ensure good working relationships."

The council considers that 20 such area bases would be necessary in England. They envisaged that most would encompass three to six local education authorities and one or more higher education institutions. Within this grouping there would be the potential for more than one centre of excellence where relevant strengths and expertise had been identified.

The UCET's recommendation for a rolling programme of finance incorporates a simplified pooling system. Such funding should also include a subsidy for institutions, to allow them to continue attracting private fees from individual teachers at no cost to L.E.A.s. Colleges should be directly funded for short INSET courses and not have to rely on their local authorities. West London Institute has told the ACSET.

## Des. res. up for sale

The University College of Wales, Aberystwyth is to sell one of its most popular halls of residence because of falling student numbers.

Despite a strong campaign by students and some staff over two years, the college council agreed last week to sell the 60-bed Padarn Hall.

Although Padarn, unlike many of the other Aberystwyth residences, is always full, and is prized as a link between the university and town, its location has made it the most salable hall.

According to unofficial estimates, the building, once the site of the Lion Royal Hotel, where hotel porters met every train, is worth about £150,000. It is likely to be bought by a supermarket chain.



## Sad story of the misunderstood

Geoff Maslen reports on mental health problems in Australia

About 15 per cent of female and 9 per cent of male tertiary students in Australia suffer from psychiatric illness at some time during the academic year, according to a leading psychiatrist. But because of lack of training, many student counsellors risk diagnosing serious disorders as merely "problems in living".

Dr Scott Henderson, director of the National Health and Medical Research Council's social psychiatry unit at the Australian National University, says there is a need for student counsellors to undertake formal training in the psychiatry of young people.

"Without such training counsellors will risk attributing the students' symptoms to 'problems in living' with which they are much more familiar and which are, of course, much more common. Such diagnostic errors can be fatal," Dr Henderson says.

Writing in a journal of the Commonwealth Department of Education Dr Henderson says almost nothing is known about the mental health of

staff in tertiary education, although there is a need for a national study.

He says the disorders facing many students on higher education campuses across the country are much more than trivial short-lived states of personal distress suffered by most people.

One study, for example, has shown that at least 10 per cent of first and second year university students were found in the course of a year to have had a mental disturbance they rated as serious. Symptoms exhibited were unhealthy levels of anxiety, depression, or both, and physical symptoms with no physical cause.

Dr Henderson said: "Anxiety is a normal part of life, and perhaps it is especially relevant to today's student. But here we are talking about morbid or pathological anxiety, which the

sufferer knows is quite in excess of the situation, is intensely painful and is outside his or her ability to control.

"The same holds for depression. We are talking of something much more than a gloomy mood lasting a few hours. Instead, the individual with a depressive illness has usually lost several kilograms weight, has sleep disturbance, diminished appetite, a belief that she or he has failed others, and a persistent sense of sadness throughout the day. There is no ability to enjoy living and there may be recurring thoughts of self-destruction."

Psychiatric illness is a recognized cause of student wastage and what is needed is further studies of tertiary institutions, particularly if they point to institutions with strikingly high or low rates.

Dr Henderson identifies factors associated with an increased probability of developing an emotional disorder: *Gender*. Women students have almost twice as much such illnesses as men; *history of nervous problems*, anxiety, depression, or psychosomatic symptoms; *year of studies*: first year students have higher rates; *home life*: pressure from parents or spouses to perform well; being an *overseas student*, particularly from another culture or ethnic group.

He also mentions: participation in non-work aspects of education, such as clubs, societies, religious groups and sport. Students who do well on these counts rarely have psychiatric problems at university or college; living in flats, rather than the parents' home or a hostel; complaints of

loneliness. According to Dr Henderson, not current stresses or crises that play a major role in psychiatric disorders, but rather a stable personality and ability to cope.

"Current adversity, as in a post-interpersonal crisis, only precipitates problems for those who are already vulnerable," he says.

But there are no grounds for believing that students have more psychiatric disorders than any other group in the population of the same age.

Dr Henderson says that screening for psychiatric illness is now available in the same way as screening for cancer. Screening instruments, usually self-administered, are available but have not been fully utilized in university health centres.

"The evidence is steadily strengthening that people are much more likely to reveal their true emotional state to a visual display unit than to a clinician interviewing them," he says.

## Students lured into high tech business

from David Dickson

PARIS

Students at the prestigious Ecole des Mines in Paris, the training ground for many of France's top engineers, are being encouraged to explore ways of setting up small high technology companies, even before they have graduated.

This step is one of a number of measures that have been announced by the minister of industry and research, M. Laurent Fabius, in an effort to stimulate the French economy by creating closer links between higher education institutions and industry.

M. Fabius said last week that his proposals, which have been endorsed by the French council of ministers, and mean doubling the money spent on applied research, are aimed at encouraging the growth of small and medium scale companies. He quoted Silicon Valley - a spin-off from the research activities of Stanford University, California, as an example of what he would like to see in France.

Many top engineering students prefer the lucrative salaries and high job security which they are offered by major industrial companies as soon as they graduate - and sometimes before. M. Fabius hopes that he can persuade some of them to set up their own businesses.

Funding for small enterprises set up by students at the school will be provided by the national agency for the application of research (ANVAR) and the move has been warmly greeted by the director of the institution, M. Pierre Lafitte.

Also the number of awards which the ministry provides for research students working on applied science topics of direct interest to industry will be doubled to 350. Furthermore, all government agencies responsible for funding research will be required to place a greater emphasis of areas of potential commercial application.

The ministry, which already supports major research programmes in areas such as micro-electronics and biotechnology, is planning to initiate further programmes in the fields of new materials, metallurgy, the industrial use of lasers, and surface chemistry.

In announcing the new measures, which will have to be funded out of economies made elsewhere in his ministry's budget, M. Fabius pointed out that France currently spends about 1.2 per cent of its gross national product on research related to industrial needs, compared to 1.8 per cent in the United States and 1.5 per cent in Britain.

The total expenditure by the French government on industrial research was less than the research budget of a single American university, the Massachusetts Institute of Technology.

M. Fabius's moves are the latest in a succession of developments that have been introduced by the socialist government of President François Mitterrand to stimulate a closer relationship between the academic and the industrial communities. The national centre for scientific research (CNRS) for example, the major source of funding,



M. Fabius: hopes to stimulate economy

for university research which comes under the responsibility of the ministry of industry and research, has recently set up a number of small companies designed to help transfer the results of its research into the market place, such as a robotics company in Toulouse named Midi-Robots.

Furthermore the government has recently agreed that new contracts for employment for scientists will explicitly state that they have a responsibility to explore ways of applying the results of their research. Career patterns are also being changed to make it possible for such scientists to spend up to three years working in a private corporation and then return to their laboratory with no loss of seniority.

Conversely, both universities and government laboratories are being encouraged to offer temporary research positions for industrial scientists and engineers, and to develop courses aimed at bringing them up to date with new technologies and research techniques.

The measures announced by M. Fabius are directly in line with a research law passed by the National Assembly in July 1982, which reformed the way in which the activities of the research community were to be financed. It also complemented the recent higher education law, requiring a similar reorientation towards the world of work in the content of undergraduate courses.

Some scientists in France, however, are worried that the new emphasis on applied research could mean fewer funds for long-term basic research projects. The law passed in 1982 appeared to avoid this problem by committing the government to significantly increasing total funding for all areas of research, aimed at the ambitious target of raising research and development spending from 1.8 per cent to 2.5 per cent of the gross national product by 1985.

M. Fabius has now admitted that the budgetary constraints being imposed by the government to meet the general climate of economic austerity means that this target will not be achieved, at least not until 1986 at the earliest.

## Professoriat loses its powerful illusions

from E. Patrick McQuaid

WASHINGTON

Once the teaching staff comprised the central nervous system of most American colleges and universities. They were the prime source for defining institutional character and determining what course of events the school, and often enough, the nation would follow. But now the American professoriat has lost ground to what is commonly called the administration.

Last month, the US Supreme Court stripped teachers at public colleges of any illusions, noting that it "has never recognized a constitutional right of faculty to participate in policy-making in academic institutions."

The ruling by Justice Sandra Day O'Connor in a six to three majority, overturns a lower federal court order that instructed the administration at a Minnesota community college to include non-union teaching staff in discussions pertaining to institutional policy and management.

The original action was filed in 1974 in the Minnesota district court, pitting the state board for community colleges and the Minnesota Community College Faculty Association against 20 non-union lecturers. That court reasoned that "issues of higher education have a special character" and that "the right of expression by faculty members holds special place under our constitution."

The federal district court concluded due to "vital concerns of academic freedom" that "when the state compels creation of a representative governance system in higher education and utilizes that forum for ongoing debate and resolution of virtually all issues outside the scope of collective bargaining, it must afford every faculty member a fair opportunity to participate in the selection of governance representatives."

Justice O'Connor writes, however, that "this conclusion is erroneous" and that the teachers "have no constitu-

## Amnesty for victims of politics

from Bernard Kennedy

ANKARA

Thousands of university drop-outs have been given a second chance to complete their studies by the Turkish parliament. As a result of the much-publicized "student amnesty", the majority of undergraduates sent down over the last seven years now have the option of returning to higher education.

The original thinking behind the amnesty was that students who failed to keep up their studies or decided to abandon university life during the period of political turmoil which preceded the 1980 military intervention should not be penalized for this - they were simply victims of circumstance. However, the scope of the amnesty was gradually widened during parliamentary discussions to include those expelled on grounds of academic failure up to and including the current academic year.

One peculiar consequence of this is

that a student sent down today may confidently apply for reinstatement tomorrow - a situation which will continue to exist until June. At the Black Sea University in Trabzon, students were already being reinstated even before the amnesty became law and the rector was quoted as saying that the decision was to who did and who did not fall within the scope of the amnesty would be taken retrospectively, so that studies were not interrupted.

There was no real opposition in parliament to the general aims of the legislation, and with local elections less than a month away, this was understandable. However, the decision to include students who have not made the grade in the post-1980 period might be seen as a disguised attack on the Higher Education Council, the body set up by the military administration to oversee all aspects of higher education and which has since been accused, among other things, of promoting

academic failure by increasing the workload and issuing new and confusing examination regulations.

HEC president Ihsan Dogramaci, who was in parliament during the debate, has always been careful to point out that the question of an amnesty was a matter for parliament and not for the council.

Last summer, the HEC itself piloted an amnesty for final-year students, but only a handful of drop-outs were able to benefit. The present amnesty paves the way for between 30,000 and 60,000 former students to return to the universities, according to education minister M. Vehbi Dinçerler.

Students who have been removed under martial law regulations, who have been convicted of offences against the state or who have been expelled, since the HEC came into being, on disciplinary rather than academic grounds will not benefit from the new law.

## Party faces apathy fears

Polish party activists are becoming

worried about student apathy, although official representatives do their best to mitigate the statistics. A recent press conference in Warsaw was told that, although only 10 per cent of students belong to the Association of Polish Students (ZSP), the influence of the organization is considerably greater, since non-members also participate in the activities of the ZSP.

The ZSP was intended to be a mass student organization, and was created by virtually dissolving the existing Socialist Association of Polish Students (SZSP) except for a small group of political activists. The hope was that the new ZSP would attract former members of the Solidarity-linked Independent Students Association (NZS) which was dissolved in January 1982.

Some of the recruitment difficulties of the ZSP seemed to arise from its lack of clear purpose. Until summer 1980, all student activities and needs, including, for example, cheap travel and holiday arrangements, were by the SZSP. During the Solidarity period, the NZS became numerically the most powerful student organization, claiming up to 75 per cent of membership in some universities and colleges.

Since, however, the party-linked SZSP still continued as a political organization, the social aspects of student life (welfare, cheap travel etc) could not be handed over to NZS, but were instead administered by "student self government committees". Shorn of any real social or welfare role, the NZS was thus open to accusations of being simply a political organization, and as such it was suppressed.

Since these "self government committees" survived the imposition of martial law, the ZSP has no obvious social role. Recently the party has organized a number of working groups and conferences on the role of the intelligentsia in "socialist renewal" and the need to involve young intellectuals in the political process.

## Teacher training proposal angers Dutch academy

from Jessica Kuper

LEIDEN

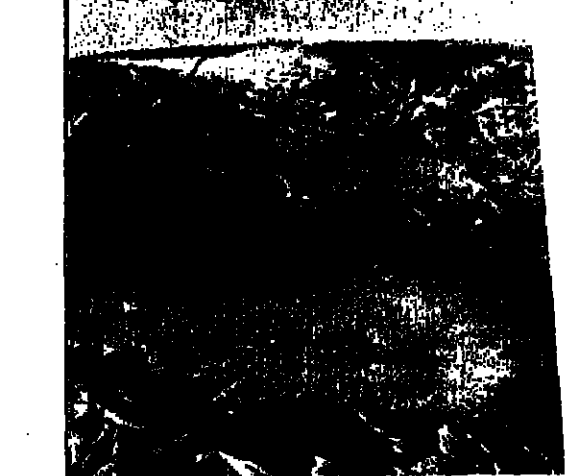
The Dutch Academy of Sciences has reacted sharply to a government proposal to transfer the training of teachers for academic secondary schools from the universities to teacher training institutes. This move is part of an effort to coordinate all teacher training in special centres.

Spokesmen for the academy commented that very soon, no more teachers would be university graduates. Teachers in the past graduate teachers had been the norm in the more academic streams, and even some PhDs had chosen careers as school teachers. Students being prepared for university entrance would be

trained by teachers who themselves had no experience of university education. Such a development would inevitably threaten educational standards.

The teacher training institutes today prepare teachers mainly for the lower academic streams. If the plan to allow them to take over the training of the more academic teachers succeeds, then the universities will lose students. Future teachers, who otherwise would have proceeded to universities, will choose instead to attend teacher training institutes, because they will become the only avenue to careers in education. Arts faculties are especially pessimistic about the consequences for their student numbers.

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Hans Dietrich Genscher: stirred up horns' nest

## Row grows over private universities

from Barbara von Ow

MUNICH Senior politicians and leading academics are becoming increasingly embroiled in a heated debate on whether Germany should have private "elite" universities. Foreign minister Hans Dietrich Genscher, who stirred up a hornets' nest when he floated the idea of academic elites last December, defended his proposals earlier this month, saying a dynamic and efficient education system was the key to Germany's transition into the age of high technology.

Schools and universities had to gear young people to the challenge of the second industrial revolution unleashed by the United States and Japan. For this, Germany needed private universities, which academic and financial attraction would draw top international experts to Germany, preventing the nation from becoming a "provincial" outsider in the technological field.

Genscher said he was happy he had set off a debate which he admitted went deep into the ranks of his own liberal party (SPD); but which had finally broken the taboo about the idea of elites.

Earlier Willy Brandt, chairman of the Social Democratic opposition party (SPD), had stepped into the controversy, calling Genscher's proposals an attack on the democratic and social foundations of Germany's constitutional law. Unions and social democrats would vehemently oppose any attempt to drum up new elites out of a classless, hidden or not, for the common people, he stressed, in an article for the *Medikal Tribune*. SPD education expert Björn Engholm also lashed out against Genscher's proposals, saying they were not in the public interest.

At present there is only one private medical university at Herdecke (North Rhine Westphalia). Another is planned to open in Bavaria next year, while a first private management school is due to open in Koblenz in six months' time.

## Unesco campaign alleged

from E. Patrick McQuaid

CAMBRIDGE, Mass

Claims that the State Department attempted to plant news reports, manipulate editorials, and stage a covert letters-to-the-editor campaign to sway public sentiment in favour of the government's decision to withdraw from the United Nations Educational, Scientific and Cultural Organization are the latest thrust in the battle between Reaganites and the press.

The charges were made in the weekly trade journal *Editor and Publisher*, which reported having obtained copies of internal ministry memoranda outlining the strategy which not only failed, but backfired. These events came hard on the heels of two other persistent misgivings for the White House - disclosures that the director of the US Information Agency had routinely wiretapped telephone conversations and that the agency had compiled a blacklist of 84 persons who should not be permitted to speak at government-sponsored engagements abroad. The roll, according to the *Washington Post*, includes Colorado Senator Gary Hart, the dark horse candidate who has been gaining steam in the Democratic race.

State Department officials have refused to discuss the December 16 "action memorandum" from Mr Gregory Newell, assistant secretary responsible for the Bureau of International Organization Affairs, explaining that the document is "classified".

## Amnesty lists conscientious objector jailed in Finland

from Donald Fields

HELSINKI

Mr Pertti Haaparanta, an assistant in the economics department of Helsinki University, has become the first Finn ever to be listed by Amnesty International as a prisoner of conscience. His case has aroused strong passions in the academic quarters.

Since January 10, Mr Haaparanta has been behind bars after a government-appointed board rejected his application to do civilian instead of military service. Along with 30 other Finnish conscientious objectors, he has been given a nine-month sentence by a municipal court following his appeal against a board decision that his preference for the civic option, which includes work in the social and health services, was not rooted in genuine convictions. So far, two have joined Mr Haaparanta in jail.

The affair - which has oddly with Finland's excellent reputation in the human rights field - has seen the authorities successively ignore a petition urging President Koivisto and the government to pardon the convicted objectors; a parliamentary question signed by 71 of the 200 MPs, and a memorandum urging objectors to stick to their non-violent principles despite board decisions.

Among the 166 signatories of the memorandum, more than two-thirds are university teachers and students. Some of the most influential members

of the Helsinki University staff have signed a petition deploring a ruling by the all-powerful university council that Mr Haaparanta, who is currently engaged on a doctoral thesis for Yale University, should not be able to exercise his academic duties from the open prison in which he is housed.

Dr Esa Saarinen of the university's philosophy faculty, a prominent campaigner on the objectors' behalf, believes the Amnesty International decision, which has aroused feelings of shame among sensitive Finns but has yet to shift the authorities, was justified. He points out that the share of convictions for civilian service turned down by the board has rocketed from about 5 to 20 per cent in the last five years.

The chairman of the Finnish Union of Conscientious Objectors, assistant professor Jouko Väänänen, works in the university mathematics department. He told *THE TIMES* that part of the problem lay in the fact that whereas the ministry of justice was responsible for handling appeals against arbitrary board rulings, it was the ministry pertaining to conscription legislation that all parties to the dispute believed that it was the choice between military and civilian service was absolutely free, the low proportion of the alternative - 2 per cent - would not increase significantly.

## Oil drop leads to cuts

from P. E. Burke

OKLAHOMA

Financial problems have plagued colleges in the US Southwest for the past year and now have caused the dismissal of tenured academic staff.

Rogers State College at Claremore, just to the north of Tulsa, has closed down completely its sociology and psychology departments. "This is the result of efforts to downsize the institution in order to meet the budget cutbacks mandated by the State," said the college dean Dr Richard M. Mosler.

Oklahoman education is largely funded by oil revenues and the drastic drop in the amount of oil pumped and sold over the past two years has put educational institutions in a financial bind, which has been intensified by "Reaganomics".

The elimination of the departments has reduced the number of 1984 enrolments to 2,425 students from 2,904 in 1983.

At the Lloyd E. Rader Centre, an institution in the western suburbs of Tulsa, psychology has been phased out. However, for the moment the Rader Centre still has sociology and psychology on the staff. Dr Conway said that the move will save the Rader Centre about \$200,000 a year.

## Ruling is civil rights setback

CAMBRIDGE, Ma

America's highest court of appeals reinterpreted a 1972 civil rights statute, paving the way for legally sanctioned discrimination against women in American colleges and universities.

In a six to three vote, the US Supreme Court ruled that receipt of institutional aid by students binds only a institution's faculty as Title IX, barring gender discrimination in federally assisted activities. The decision binds to an end the seven-year court confrontation between Grove City College and the secretary of Education, M. Terrel Hult.

The ruling is a break in a string of defeats for the Reagan government's civil rights issues and a major setback for women's interest groups, such as the National Organization for Women and the National Women's Law Centre. But while the court has made the matter far from settled, it is unlikely that Congress will not stand by the ruling and legislation has already been introduced to provide Title IX with a much wider application.

Last November Representative Claude Schneider, a Rhode Island Republican, in a poll of congressmen introduced a non-binding resolution to broadly construe the rights regulations. Her measure was passed 414-8 and she has every intention of pushing through binding legislation this time around. The Senate may take a different stance. While favouring as broad an application as the House, influential members have expressed grave misgivings over Reagan's narrow views on Title IX.

Grove City College is a small Presbyterian liberal arts school in rural, northwestern Pennsylvania. Total enrolment is roughly 2,000 students, with only 140 receiving federal grants or loans. The college itself has traditionally refused to accept or apply for any government funding and contends that it is not bound by regulations tying aid to compliance.

To date there has not been a shred of evidence suggesting that Grove City discriminates against women. The spat is over Grove City's decision not to fill out and return a Department of Education document - form 887 - which promises not to violate Title IX. At stake are the individual student loans.

All nine justices did agree that the college must file the form or for cut-off of student funds. Justice Byron White, author of the majority opinion, concedes that direct government student grants and loans "ultimately find their way into the college's general operating budget and are used to provide a variety of services to its students."

In an afterword, Justice Lewis Powell chastised the government to "over-zealousness" in dragging its case out for so many years, especially where there has been no charge of actual discrimination.



# Providing answers without questions

Leonard Bloom and Howard Woodhouse take a critical look at Nigeria's university and college system

Nigerian higher education has failed to fulfil the praiseworthy aims of the national development plan and shows no signs of rehabilitation.

The values of scholarship, of research and of intellectual independence have been nearly destroyed by bureaucratic ineptitude and lack of imagination. The social, economic and political needs of a changing society have been insincerely acknowledged and effectively ignored.

Instruction is frozen into old-fashioned teaching methods, and distant and suspicious staff-student relationships are typical. Moreover, the failure of higher education influences the lower levels by providing a model of an intellectually barren and creakingly inefficient system.

One major reason for this state of affairs is the poverty of the educational philosophy that is implicit in the system. Paulo Freire has observed, "behind every educational system is a particular concept of human beings". If this is so, then behind the Nigerian system is the concept of students as irresponsible, not to be trusted to study themselves, fit only to learn what a remote elite considers fit for learning, and finally as unable to learn without the good of a mechanical and punitive examination system.

In 1977 the role of education within Nigeria's national development plans was defined in the document *National Policy on Education*. Broadly, it was held that higher education should develop high standards and should encourage national awareness and unity, both of these aims being achieved by improving the "quality of instruction... with a view to further enhancing objectivity and tolerance."

The policy was the direct result of a government seminar, held in 1973, to deliberate on all aspects of educational policy. Experts drawn from the universities, the National Universities Commission, external agencies, Christian and Islamic religious organizations, and women's organizations were invited to deliberate on policy issues with a view to producing a comprehensive educational policy leading to the "even and orderly development of the country".

Official representatives of the Nigerian Union of Teachers (NUT) were excluded from the privileged group of policy makers. This major oversight on the part of the federal government serves to illustrate that both the national policy and the resultant school and university curricula may reflect the interests of powerful social groups (educationalists, policy makers, politicians, etc) other than those whose task it is to implement it in the schools (teachers and lecturers). The curriculum is not only a selection from the culture, but also the product of powerful social groups whose interests it serves.

There are two general aspects to education central to the account given in the national policy on education. The policy poses the following fundamental question: should education aim at individual or social development? While the two are not mutually exclusive, they have certainly led to different emphases in both the theory and practice of education, depending upon which of the two was seen as paramount.

As a result it is necessary to determine the extent to which the educational system is willing to support the objectives of personal development, selected by the individual, for his or her own purposes. It is also necessary to decide the extent to which it is desirable and proper for the state to decide upon its own needs and to use the educational system to meet those needs.

The national policy on education aims to respect and harmonize these conflicting aims by both respecting the freedom, dignity and rights of the individual and producing a dynamic, free and self-reliant nation.

Individual self-development has been the aim of traditional liberalism in its political, social and educational theory. Liberalism views the indi-

vidual as the fundamental atom upon which society is based. As a result, society and the state must function in such a way as to promote the freedom and well-being of the individuals that comprise it.

In the national policy on education there are aspects of traditional liberalism, particularly in those sections that emphasise the autonomy and dignity of the individual. Thus one of the emphases present in the policy is the liberal ideal of self-development, self-realization and personal autonomy.

At the same time, the policy emphasizes the need for the development of both national consciousness and unity and a dynamic, free market economy in order to produce a more harmonious and self-reliant nation. Here the emphasis swings away from the development of the individual to that of the nation and society as a whole.

One of the aims of mass education is to promote the ideal of national unity and loyalty to one's ethnic group. Individuals must pursue not only their own self-development but also contribute to the development of their society. Their freedom, therefore, is to be limited by the overall move towards producing a strong, unified and self-reliant Nigeria.

Education is to be one of the main instruments in producing this state of affairs. Education, therefore, must inculcate the virtues appropriate to national consciousness, which are: public-spiritedness, voluntary service, sense of responsibility, loyalty, sense of fair play, honesty, respect for opposing opinions and views, self-sacrifice for the good of others. The duty of the state is to produce individuals with these values so that they may contribute towards a regenerated Nigerian society.

However, the national policy on education says little or nothing about how the latent conflict between individual and social development could be resolved. Indeed there is no recognition that a conflict might arise between the two sets of ideals of individual and social development.

Naturally, governmental reports tend to gloss over problems in the implementation of their policy and the national policy on education is no exception. But this does not resolve the problem in any way.

The problem of the conflicting aims of individual and social development underlines the need for education (and higher education in particular) to cater to the cultural needs of the people of Nigeria. It must be admitted that these needs have not been totally ignored. For example, recent empirical research confirms the general thesis that higher education in Africa has allowed a certain amount of vertical mobility.

In a study conducted at the University of Calabar in the academic year 1980/81 it was discovered that first year students in the faculty of education were drawn from a wide variety of social classes: that to some extent reflected the class composition of Nigerian society at large. This encouraging news must be balanced against the experience of the students from poorer socio-economic backgrounds that had often been discriminated against by teachers, simply because they were poor.

As a result of low teacher expectations and poor school facilities, students from poorer socio-economic backgrounds had to work doubly hard to succeed. Where they were successful (as in the case of the students tested) this was in spite of the institution of the school where both teacher expectations and facilities worked against them.

The class bias of schools, which the study reveals, is a phenomenon common to both industrial and developing societies. However, Nigeria is no exception and there is little evidence to suggest that the national policy on education has been implemented in a



Nigerian students at work

way that will effectively counteract the bias. Indeed, it has been suggested that the bias against poor students is growing.

Higher education fails in four specific ways in Nigeria. First, there is an atmosphere of punitive authority in which there is little freedom for students to grow into an informed and self-confident maturity, intellectual or social. It has been repeatedly observed that traditional African cultures are authoritarian, permeated by the principle of unquestioning obedience to established authority and discouraging curiosity and independence of thought.

Okonji, a Nigerian psychologist, has also related socialization to cognitive styles. In brief, social authoritarianism is related to authoritarianism of the mind, because the lack of imagination in authoritarian, conservative people is in direct relation to their desire to maintain the image of a stable and unchanging world. And where only one world is conceived, there can only be one acceptable way of thinking—a conformist way.

An educational system, like that of Nigeria's, that stresses conformity, nervously conceals the existential reality that many things can only be understood through a penumbra of ambiguity and flux.

Like the wider social system, higher education in Nigeria is fearful of change and resistant to it, and is saturated in a conservative, authoritarian social philosophy. Of this pre-reflective authoritarianism, endemic to African traditional societies, Professor Otoni Nduka has written: "In contrast (to the west), African traditional society lacks this tradition of reflective and critical thinking. It has developed a rich variety of 'philosophies' but failed to develop critical philosophy. It is a well known fact that deviation from the cultural norms based on these philosophies is usually severely frowned upon."

Under close scrutiny, the national policy on education is indeed a non-starter in the philosophical stakes precisely because it fails to articulate the manner in which democratic decision-making bodies could be developed in the schools of modern-day Nigeria. There is a singular lack of movement away from the authoritarian ways of the past. The policy, by failing to consider these questions stimulates the familiar non-philosophical outlook of accepting conformity.

The reality of the lecture halls of contemporary Nigerian colleges and universities lags behind even the philosophy of the national policy on education. The text book has to be learned, lectures attended, and if these are successfully done then students can expect to pass their examinations. They need do no more.

The second way in which higher education fails to meet the needs of the national policy on education declared priorities in Nigerian higher education. Yet the universities have been allowed to fail in implementing the scientific ethos of the society and of the universities and partly because of the inability of the universities to initiate changes in society's ethos.

It is not uncommon, for example, for students to attend "theoretical practicals" because there are insufficient practical materials, inadequate equipment and very few competent and committed teachers and technicians. Simple, inexpensive workable equipment is

rarely bought and more rarely taken care of, because it is more profitable to waste funds on unusable costly equipment that has attracted a lively 10 per cent "dash".

Not surprisingly, very few students who have the ability to do so decide to graduate as teachers of science or mathematics; in the University of Calabar, for example, in 1981 there were 85 graduates in education of whom four graduated with physics and one with mathematics as their first teaching subjects.

Third, the institutionalised corruption of Nigerian society at large is simply reflected in the universities and colleges of higher education. Rather than acting as a catalyst of change in this crucial area of concern, institutions of higher learning swim with the tide of corruption. Thus a contract for a university library, for example, includes a 10 per cent to 30 per cent take-off for top university officials.

Until recently the trough of public money to be squandered on grandiose university buildings encouraged private firms to submit inflated tenders for work proposed and to over-charge once such contracts had been secured. University and college administrators encouraged this malpractice because they stood to benefit financially from it.

Were universities and colleges truly democratic institutions, governed by those who work and study in them, students and others to express their concerns in rational, non-violent ways. Yet there is no direct avenue for students to use in order to express their concerns about university, college or any other matter.

When they do take matters into their own hands students tend to express their frustration by attacks on university buildings, and destruction of the "public" property of administrators, such as official cars and sumptuous offices. Given the appalling conditions that many students are forced to live under in the halls of residence, it is surprising that such outbreaks of violence are not more frequent.

Since March 1982 there have been instances of students protests at the universities of Calabar, Ife, Ibadan and Maiduguri. The reaction of university authorities, backed by the police, have been predictable.

In 1979 the federal government intervened in the internal affairs of universities suffering from a national strike of university students.

University staff later re-emphasized this demand for university autonomy in their 10-week strike in 1981. While their several demands were well articulated and some of them met by the federal government many lecturers that university autonomy in the form of academic freedom is a commodity all too rare and barely, if at all, protected.

Finally, higher education provides a far from admirable training in cooperation and national unity—despite the repeated exhortations by academic leaders to students that they should show their loyalties to ethnic or other fragments of their society and behave and think like Nigerians. One could hardly expect otherwise. The example that students see daily is that their teachers and the recruitment of staff and students is based upon ethnic and, following the expulsion of one million Chaguanians in April last year, racial considerations.

Students are encouraged to form and to support ethnically-based organizations. At both staff and student levels many truly national or international organizations have been proscribed because it is claimed that they are politically dangerous rather than being welcomed as a sign of political and intellectual maturity.

We do not accept the validity of any of the orthodox objections to extending freedom to young and allegedly immature people, because these objections all seem to be reducible to a variant of the notion that "I know what is good for you. And you should respect me for knowing it." We further agree with Nduka's view that the task of philosophers of education should not be limited by the fear that traditional (or indeed modern) values might be unable to withstand the winds of criticism.

Three practical objections have to be answered. First, it has been argued that the quality of university students is outside the control of the universities, and if the universities were to adopt the educational philosophy and practice that we advocate, the students would be unable to benefit from them because they are insufficiently sophisticated.

But the universities could (indeed should) be more assertive in setting the standards of students and could be more positive in modifying the educational system in a more democratic and creative direction. The universities could do more to show the folly of adopting politically motivated quota systems that do nothing to improve the general level of students in the so-called bringing about of academic change.

Second, it is a plausible argument that education cannot be divorced from the socio-political system of which it is a part. If the wider system discourages individual differences by extolling conformity, it is unshakably conservative and authoritarian, then there is little that the universities can do.

This, alas, is true, and not of Nigeria alone. But the universities ought to give a new sense of direction to the society because a changing society needs a different kind of citizen. It does need divergent, innovative and independent responsible young people. The universities have a duty to attempt at the very least to educate young people.

Third, the students themselves have been held responsible for the passive qualities that we reject: students are often inflexible and unwilling to allow their lecturers to depart from established patterns of teaching and relationships. Moreover, they may prefer to work for examinations because they are clear goals and highly motivating. However, many things besides examinations are motivating, especially the enthusiasm and dedication of the teacher. And if the academic environment offered more than the bleak walls, over-crowded rooms and under-equipped laboratories and classrooms that characterize most of our universities a healthy motivation might be more evident.

One practical reform that might break the obsession with examinations would be the adoption of a three-year pass degree programme in which there were no examinations of the orthodox kind. Instead there could be a continuous evaluation of the students' increasing mastery of knowledge and skills, using such techniques as the open-book examinations that have long ago been adopted by law faculties.

The style, even the necessity of examinations or essays, would be left to the discretion of individual lecturers. Departments would be free to decide on the methods of evaluation most appropriate to their subject.

Nduka sees the greatest weakness in the Nigerian educational system as its epistemological orientation and indeed it seems that Popper's notion of the "bucket theory of the mind" has been widely adopted. This theory of the acquisition of knowledge treats education as though the mind were a receptacle into which "facts" are poured until the pourer decides that the container is full enough. Students are thus converted into "secretaries" as they writhe describe themselves—and ideas are dead objects, to be swotted over for an examination but not pursued for their own sake.

The alternative to a changing philosophy in changing institutions is that the universities will continue to fill buckets and produce "secretaries"—graduates who are obsolete, sterile and uncreative, poor practitioners of a profession, and cynical or withdrawn citizens. Can Nigeria afford this?

## Filling in the empty spaces between law and medicine

The Centre for Law, Medicine and Ethics at King's College, London, was inaugurated in June 1978 by the Lord Chancellor. Its avowed aims were "to provide opportunities for study, research and discussion of problems common to law, medicine and ethics" and "to encourage and facilitate the investigation of problems, both practical and theoretical, transcending the frontiers of any one of these three disciplines into one or more of the others".

The centre is run by an advisory board of eight (along with a further seven *ex officio* members) and by the four directors, Professor J. S. K. Ward, professor of moral and social theology at King's, Dr Roger Higgs of King's College Hospital Medical School, Professor Ian Kennedy and the bursar, Mr M. M. Tempany.

Achievement has been slow but steady over the five years since the centre was established. There is now every sign that it and its work have been accepted by the academic community and that the centre is now recognized as a focus of research and comment on legal and ethical issues arising from the practice of medicine.

A lunchtime lecture series in the

plines in the humanities and natural sciences. In one sense, there is nothing intrinsically new about the work of the centre. It merely formalizes and focuses issues which have been investigated more or less informally for many years but which may have been in danger of disappearing in the interstices between disciplines.

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Lent term has become an established feature of college life and audiences have swelled to anything over 100. In 1982 the subject was the ethical and legal issues associated with bearing and raising children. Last year, the series focused on "Current Dilemmas in Medical Ethics", a theme developed in the most recent lectures, on research on embryos, the pill and young girls and allocation of resources within the National Health Service.

Financial resources remain the centre's greatest problem. The directors have regularly diverted funds from their own pockets or from speaking engagements to meet expenses and entertain guests. Research money is still not available in sufficient amounts and despite help from the college with secretarial work and stationery, the centre still compares poorly with similar institutions in Europe and the United States.

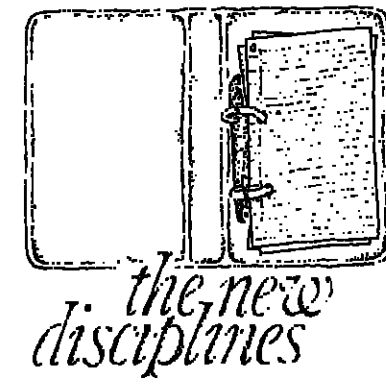
Financial restrictions have had some positive repercussions. To

avoid duplication and thus save money, the centre's growing library has been able to work out a scheme of cooperation with four other institutions, the British Medical Association, the Society for the Study of Medical Ethics, the Lincoln Centre and Hecythrop College. Cross indexes have been created and researchers can gain access to the libraries of the other participating institutions.

On the teaching side, a course on medical law and ethics has been designed by the directors and taught as part of the AKC diploma course. The individual expertise of the directors is supplemented by lectures from outside speakers. Since 1981/82 one of the directors has participated in teaching medical ethics to pre-clinical medical students, introducing an important inter-disciplinary component to their training. At a more advanced level, a postgraduate diploma course will be offered for the first time in 1984/85. It will be open to students with a first degree in medicine, theology, law or some other

relevant discipline. The chief aim, however, is to establish the centre as a research base, calling on the expertise of the directors, the wider college community and those outside the college with an interest or competence in the field. So far, progress has been disappointing. In this direction, money is scarce and money is precisely the issue. The centre's plans include colloquia, lectures, field investigation projects, institution of research fellowships; the publication of individual reports and accounts of investigations; the creation of a specialist library; and, it is hoped, acquisition of suitable premises.

Money is being sought from charitable foundations and other grand awarding bodies and commercial enterprises. Until such time as the flow of income is secure and adequate, the Centre of Law, Medicine and Ethics will continue to rely almost entirely on the energy and dedication of its directors and their colleagues and students.



## The patient as consumer

Brian Morton talks to Ian Kennedy, head of the centre for law, medicine and ethics at Kings, in the first of a series on new areas of study.



Professor Kennedy: changed the mix of pepper and honey

doctors and nurses simply do not have the time to consider... during an operation... the ethical implications of the patient's situation and the doctor's action. Ian Kennedy's response is perfectly straightforward: the existence of a healthy constituted academic/advisory body on medical practice makes such deliberations unnecessary; only its absence makes them essential.

Doctors should be permitted to work within a structure of guidelines and to exercise their professional discretion in the light of previously-taken decisions of principle. There is no place for a philosopher in an operating theatre and casualty staff can only ponder the pros and cons of brain and motor damage in a resuscitated stroke victim at the price of having the issue settled for them in the most permanent way by the patient dying unattended. What Ian Kennedy and his colleagues envisage is a body of legal and philosophical expertise becoming part of every medical practitioner's toolkit. Kennedy emphasizes that he is not tampering with professional autonomy: "We can build prescriptive mechanisms which leave room for discretion and change. After all, it is the mark of any professional that he uses discretion"; all professions arrogate some degree of discretionary behaviour and thus a certain area untouched by "accountability"; an intelligent legal and ethical apparatus simply obviates the kind of mistakes made by taking wrong decisions of

more crucially, by being forced into taking an *ad hoc* moral decision in the first place.

The existence of a standing advisory committee would, in some sense, solve the problem of medical law. Up to the moment, there have been no dramatic moves toward reforming the system. In the rather more diffuse area of medical ethics—as distinguished from certain law—there have been pronounced developments which form part and parcel of wider rethinking of health care. Just as legislation tends to work in a piecemeal way, so medical practice has tended to become pragmatic and reductive, compartmentalizing and specializing problems rather than seeing them in a wider physical, psychological and social context. Disease is a political construct and a label vested for the time being almost wholly in those who diagnose it. Doctors and their hospitals are under increasing pressure not to reduce patients to their diseases; the outcome of that tendency is that we have come to think of medicine as dispensing *cures*, as a diagnostic mechanic identifies the defective car part and either fixes or replaces it. The factor lost in all this is health itself: the health service has tended to become an illness service.

Almost no diseases can be cured and the danger of thinking that they can is that our relationship with doctors becomes a client one no more elevated than the mechanic-car relationship. For all the massive energy and spending that went into a large-scale social medical campaign like *Reich's*, the danger of thinking that they can be cured is that our relationship with doctors becomes a client one no more elevated than the mechanic-car relationship. For all the massive energy and spending that went into a large-scale social medical campaign like *Reich's*, the danger of thinking that they can be cured is that our relationship with doctors becomes a client one no more elevated than the mechanic-car relationship.

There is always the danger, as with any discovery, that medical ethics will be taken over wholesale by a cadre of professional ethicists. "They cease to be analysts and become dogmatists of particular solutions." Medical ethics, he insists, is a process; as soon as it is enshrined in a *Handbook of Medical Practice*, it has already ceased to be. Here an academic structure not directly and solely involved with hospital and surgery practice is absolutely vital. It has proved all too easy to let ethics become an attractive intellectual plaything, the sole property of the hospital ethical committee or God-squad. Ethics is applied moral philosophy and the application has to be continuous and consistent in its self-examination.

Equally, back in the realm of law, there is always the risk that a legislative reform will find new bodies to legislate against, deflecting a problem and creating another. The existence of an academic structure acts as a kind of guarantee of disinterested autonomy. Ian Kennedy sees himself as a "continuing urger for sensible and sensitive solutions", clarifying issues, catalysing discussion, developing debate. He constantly reverts to the need for more and better communication. "My aim is to raise and improve the level of rational discourse. The medical profession have taken up the ball and are running with it. There is every indication that they are enjoying the intellectual experience."

*The Unmaking of Medicine*, by Ian Kennedy is published by Granada Publishing at £2.50.

on's "War on Cancer", the returns were remarkably thin, and the disease continued to kill more and more people. Though very considerable advances have been made in medicine, they are small set against both expenditure and research effort and the claims made for new "cures": in such a situation there builds up a circle of expectation and frustration which blurs the original problem entirely by setting every cancer sufferer's life not against its own worth and nature but against an absolute criterion of cure and a statistic of survival. The final stupidity is to treat death itself as a disease because it is bad for the figures.

Doctors and nurses are nowadays being trained to think holistically. There has already been a shift away from the highly pragmatic, scientific and empirical approach to disease. It is increasingly recognized that the humanities play a part in medical education. Clinical students at the Royal Free Hospitals are encouraged to read novels and to consider issues other than those which are strictly defined as medical. Again, this has been attacked as obscurantism and a confusion of priorities. However, that is only the case when a shift in consciousness is set against the problems brought about by its opposite: feminism is a similar example of a *style of thought* which cannot solve the problem it confronts but only begin to generate an atmosphere in which the conditions of that problem have disappeared. Doctors still require scalpels and radium; novels do not dissolve tumours. On the other hand, an awareness of wider humanistic issues may suggest alternative treatments and may even, in time, bring about such a substantial evolutionary recession that there are fewer tumours to treat.

Ian Kennedy is not blind to the risks. There is always the danger, as with any discovery, that medical ethics will be taken over wholesale by a cadre of professional ethicists. "They cease to be analysts and become dogmatists of particular solutions." Medical ethics, he insists, is a process; as soon as it is enshrined in a *Handbook of Medical Practice*, it has already ceased to be. Here an academic structure not directly and solely involved with hospital and surgery practice is absolutely vital. It has proved all too easy to let ethics become an attractive intellectual plaything, the sole property of the hospital ethical committee or God-squad. Ethics is applied moral philosophy and the application has to be continuous and consistent in its self-examination.

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## Pauline Stafford

### Why marriage laws are not made in Heaven

The recent case of the Derbyshire couple refused (and then rapidly granted) permission to marry in church proved one of those classic public relations debacles that only the Catholic Church, the Foreign Office and the CIA seem capable of staging. The prospective groom was handicapped in a way which the parish priest considered rendered him incapable of consummating the marriage; on these grounds both the priest and the local diocesan marriage tribunal refused church marriage.

The case was then referred to the highest authority, to the Sacred Congregation appointed by the Vatican to decide such questions of faith and morals. But long before the Cardinals could rule, it had become obvious that the affair had opened a can of worms. Implications for the marriages of the elderly were being raised, and, one suspects equally importantly, the media had seized on the inhumanity of the case. The Bishop of Nottingham stepped in and ruled that the marriage was permissible, "further medical opinion" (undisclosed) had revealed that the marriage could be valid according to canon law.

Few will resist the suspicion that the hasty rethink was brought about by the pressure of publicity. The couple themselves certainly drew that conclusion and decided on a registry office ceremony. The combination of inhumanity, authoritarianism and secrecy reinforced that public face of Catholicism which is such a delight to the anti-papalists and which constantly embarrasses sensitive Catholics.

I have no intention of attempting a pronouncement on the legality of the marriage under canon law. Given my sex and the teachings of St Paul, not to mention one or two other minor obstacles, I am fortunately never likely to be called to join one of the Vatican's congregations which have to pick their way through the maze which some canon law pronouncements still present. Although codified in 1917 it still contains potential inconsistencies, and a permanent commission of cardinals had to be set up to interpret "canon law" which might give rise to doubt. The decree of the Council of Trent (November 11 1563) on which the Catholic church's modern teaching on marriage is largely based, itself has the sort of deep ambiguities which give rise to question.

It is concerned with what makes a marriage, a topic already sufficiently contentious in the sixteenth century that the final wording of the decree represents the fourth attempt at a formulation on which the assembled fathers could agree. It has been subject to constant interpretation and exegesis since. The results are apparent in the contradictions inherent in this case.

I was surprised that the question which sparked off the whole affair passed with so little remark. The bride-to-be had been previously married and divorced, and had first referred to the parish priest to check whether remarriage in church was acceptable. That previous marriage and divorce apparently produced no problems. It was rejected not on the grounds of non-consummation, but because it had not been celebrated with church rites. This is the heart of a major ambiguity of Trent: what makes marriage, consent, as in Roman law and previous Christian practice, or the slippery ground concerning what constitutes marriage? Consent, priestly participation and consummation seem all to have been involved, and in the bride's previous marriage consummation somehow seemed less important than this.

The Bishop of Nottingham really ducked the issue, which is a shame since a legal, even canon legal system should be seen as feasible or at least as capable of coping with social realities. It may be of course that faith and morals and legalism are inappropriate bedfellows anyway, but that is another question which the Catholic Church seems unlikely to rethink in its lifetime.

The problems arise largely because the canon law is the fruit of two millennia of development in a church where attitudes to authority make change and rationalization difficult. Consummation, consent and priestly involvement have all been stressed at different stages of historical development and have become fossilized in the structure. What clearly seemed to many the supreme irony in this case was the emphasis on physical consummation by a church normally identified with a strongly anti-sexual stance. Was this really the same church which had given us so many prominent members of the Festival of Light? It is not a situation to be explained away by an exasperated reference to the hangings of the professionally celibate. In the early centuries of Christianity reforming churchmen sought to establish monogamy and to root out divorce and with it the looser forms of union like concubinage which were seen as making divorce so easy. The objection to divorce was based on New Testament teaching heavily influenced by the anti-sexual emphasis of the early fathers. A definition of marriage which would be all-encompassing was necessary, and consummation was the most universal and foolproof. A desire to tighten up on divorce and concubinage, inspired by a strong suspicion of physical consummation as the essence of valid marriage. The result of which has proved so embarrassing in the twentieth century starts here.

The entire incident has recalled the religious studies classes of my convent grammar school. Every year in the lower forms we acquired a new teacher, fresh from the novitiate and committed to the principles of open discussion. Every year one lesson a week was devoted to the "Question Box" - an anonymous cardboard affair into which we posted our problems on faith and morals for discussion. Pandora never lifted the lid on so much trouble as did those pink-faced young men who opened the Question Box on Friday afternoons. The 12 and 13-year-old daughters of East Leeds had an unerring nose for the inconsistencies and inhumanities of the Church's sexual ethics, though I am still half-convinced that there was a peculiar lore and language of Catholic school children which passed on those questions through the generations. How could the same tortuous cases of divorce from psychopathic maniacs in long-term institutional care have been recreated in the same glorious detail by one group of schoolgirls after another? The opposition certainly never conceded its answers, and the pink faces were invariably red and tongue-tied before the bell brought them relief. In the fifth form the formation of our moral consciences passed into the capable hands of Reverend Mother. Heretical questioning gave way to Tridentine authority and the Question Box quietly disappeared. The Derbyshire parish priest must have felt the same relief as our young novices when he handed his problem on to the Sacred Congregation.

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Hollywood robots walk, talk, fight and argue with human characters. Real robots are still mostly blind, deaf, dumb and stupid. And giving them even rudimentary sensing and reasoning powers is a research task of great complexity.

In Britain, responsibility for getting robots out of the laboratory onto the factory floor rests largely with the Science and Engineering Research Council and the university and polytechnic groups it supports. And if they are not yet the robots of science-fiction, the reasons why give us a higher regard for our own capabilities as fetchers and carriers.

The fact is that trivial skills we all take for granted are extremely difficult to reproduce with a computer program controlling machine.

For defined tasks, matching human powers can be easier for more "intellectual" skills than for mechanical ability. As Peter Davey, former coordinator of the SERC's robotics effort puts it, it is easier to program a computer to play chess than to build a robot to play ping-pong.

The council's industrial robotics initiative was set up in 1980 following a report on future applications of computing and computers by a group under Derek Roberts of GEC. The £1m a year programme is designed to give this country a stake in the second generation of industrial robots, in the belief that their use will be vital to keep British industry competitive in the 1990s.

That means doing a lot of things at once: building up a research community in a country which, in Peter Davey's estimation, is in the front rank in robotics, but near the bottom; bridging gaps between academic and industry and between computer scientists and production engineers; getting them all to do good new research; and persuading firms to consider using robots in their often old and ill-equipped factories.

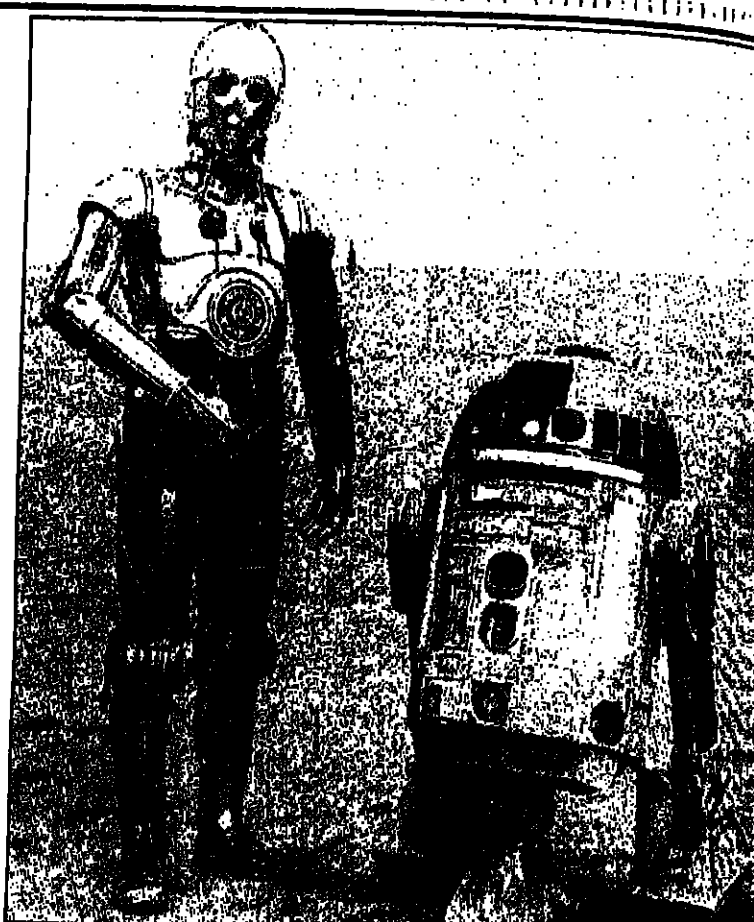
Nearly four years on, Peter Smith, the acting coordinator following Davey's decision to take the plunge into business on his own account, sees the programme entering a period of consolidation. Fruitful lines of research are beginning to emerge from the initial broad set of projects supported, and work will now be largely concentrated in a few main university centres.

According to Peter Smith, "all the indications are that the academic community doesn't mind being coordinated. Provided they have freedom to pursue research along the lines they feel are appropriate, they don't mind being edged down a particular track".

The track in question leads to the so-called "second generation" industrial robot. He explains: "If you think of the needs of robotics in terms of intelligence and sensory feedback, you can categorize them in terms of increasing disorder". In other words, it's harder to make a robot to process and pack pork chops than to handle a uniform product like car hub caps or light bulbs.

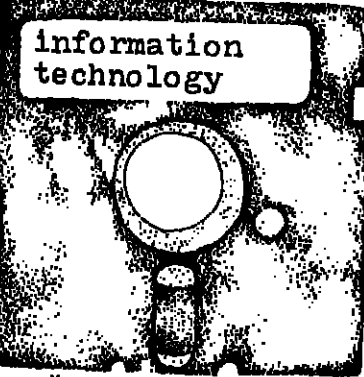
So first generation robots which take in very little information from their surroundings are stuck with repetitive tasks like welding car body panels or paint spraying. The same sequence of pre-programmed movements is followed for each item.

The next goal is to make robots which can handle assembly, where the machine must pick up parts and fit them together. This may not need intelligence but at least demands a form of common sense - knowing a screw is the wrong way round, for instance. Ideally, such machines would



Hollywood robots: See-Threepio and Artoo-Detoo from Star Wars

## A walking, talking robot dream . . .



information technology

be easily reprogrammable to assemble a new product. Further ahead than simple assembly line robots for working difficult materials like cloth or meat. And the third generation will be "stand alone" robots with some capacity to make decisions based on pre-set rules. There is a large overlap here with more general work in artificial intelligence, and it is no surprise to find Edinburgh University playing a large part in this work.

There is a problem with this neat evolutionary scheme. Robots don't fend for themselves like new species of animals. Someone has to buy them - and British industry has so far proved reluctant to make the necessary investment. So why press ahead with more research when, as Peter Smith admits, "people have said there's about 10 years' worth of advanced technology that's around at the moment which isn't being used"?

His answer is that SERC must lay the foundations for the future as an act of faith. And the whole programme is designed to bring industry into the fold.

The typical history of a fruitful partnership between an academic grant and a company - and getting a grant under the programme generally depends on finding an industrial collaborator - is for the academics to try and demonstrate some short-term benefit to the firm. Then they can go on to longer-term work which will be applicable more widely.

By developing collaboration like this, the SERC effort now includes work between Hull University and GEC-Marconi on robots for assembly work, Warwick University and fork-lift truck makers Lanning-Duggan, who want to develop driverless warehouse trucks, and Oxford University and a partnership of BL Technology and other firms interested in sensing devices to control robot welders.

In between is a whole set of smaller projects initiated by academics, including work on meat processing at Imperial College, London, and on new programming languages at Edinburgh University. The wider community participating in the programme share a pool of robotic equipment administered by the council, and attend review meetings to keep different groups in touch with one another's work.

The community's prospects for future support look good, with the whole programme about to be subsumed under a larger SERC initiative on applications of computers in manufacturing. Incorporation into the ACME directorate will mark the fact that the existing programme is already concerned with a wider range of developments in automated manufacture - the word "robotics" was kept because it is a sexy subject, Peter Smith admits.

Now the council wants to speed up application of information technology in industry across a broad front. The goal is shared by the Department of Trade and Industry, which has agreed in principle to co-manage the ACME programme. This should help ensure that automated devices continue to enter British factories, as well as providing good business for university and polytechnic researchers. When they enter factories, there is work for other academics studying their effect on the existing workforce and the influence of management attitudes on successful introduction of robots.

This is not the direct concern of the SERC's robotics programme, but Peter Smith points to work on these questions, at the Technology Policy Unit at Aston University, for example, supported by the SERC and the Economic and Social Research Council. As this work develops, maybe we will understand why the first generation of robots was received with so little enthusiasm in Britain by the time the robotics research groups have perfected the next generation of machines.

Jon Turney

Is France anti-Semitic? A French weekly asked the question in 1982. Two years earlier the synagogue in the rue Copernic in Paris had been the scene of a devastating bomb attack. This had been followed by at least eight terrorist attacks on Jews or Jewish property, culminating in the shoot up at Jo Goldenberg's restaurant in the Jewish quarter in the 4th arrondissement. Since then, the question has become wider. Is France socialist?

Attacks on North Africans and Africans have become commonplace. Certain municipal elections have highlighted a widespread resentment against immigrants and have shown that there are many French people who believe that they should be sent back to their place of origins instead of living comfortably in France at the expense of the French taxpayer (or so the argument goes). Yet whatever the feelings about Algerians, Moroccans, Africans (or for that matter Portuguese), the impression persists that if racism exists it is essentially to be found in a traditional anti-Semitism. The North Africans are accused of taking over sections of towns and turning them into slums. The Africans are believed to be criminals who will rob and mug you in the Metro. People object to what they do. But there is a different reason why the Jews are disliked. People object to what they are.

The leader of the French National Front, Jean-Marie Le Pen, in a recent television interview which attracted a great deal of attention (although probably not the 16 million viewers claimed by the conservative *France-Soir*) put forward the traditional extreme right-wing viewpoints concerning immigrants, communists and taxation. But there was a special part of his interview devoted to the Jews. He had, he claimed, the right not to like the paintings of Chagall or the politics of Mendes France. The argument is also familiar. The Jews, it is insinuated, claim a surprotection, a right to special treatment so that if you criticize someone who is Jewish then it is as if you committed a crime. It has been suggested that M. Le Pen is preparing the ground for attacks on the former minister Simone Weil who will be the effective leader of the right-centre group in the forthcoming elections to the European parliament.

But Le Pen's anti-Semitism is supposedly not unique. On the other end of the political spectrum the communist party has to face accusations not only of a general racist attitude, particularly since communists in local government destroyed a hostel which was designated for North African immigrants and noisily denounced a Moroccan for dealing in drugs, but also of a specific anti-Semitism as illustrated by their constant hostility to Israel. In 1975, the late Raymond Aron was distressed to learn that President Giscard d'Estaing was blaming Jewish or Israeli journalists for the rumours about his private life which were being bandied about Paris. Aron immediately requested an interview with the President and while he maintained his accusations against Jewish journalists, he astonished Aron by showing no awareness of the sensitivity which French Jews felt.

For Aron it was natural that such a sensitivity should exist. For a number of distinguished historians, including both Catholics and Protestants, hostility to Israel became particularly violent and merged into anti-Semitism at the time of the Israeli intervention in Lebanon. It was in response to this that the University of Paris-Sorbonne organized in March 1983 a colloquium on anti-Semitism, the record of which has just been published; without entering too much into the anti-Semitism that existed in medieval times, the participants have a great deal to say about various French publicists and politicians who over a long period have attacked the Jews.

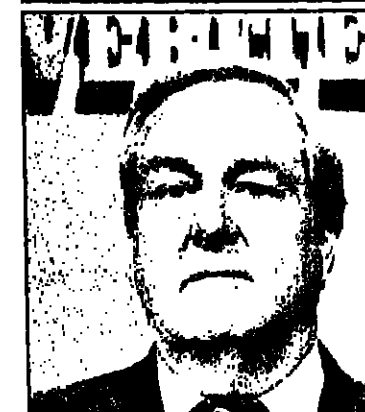
There were those who associated the French Revolution with a conspiracy organized by Jews and freemasons, and who believed that since the great victim of the Revolution was the Roman Catholic Church, then the Revolution can only be explained as the work of those who were hostile to Catholicism (and there were those who also blamed Protestants). Then this anti-Semitism which can be described as being of the right was joined by an anti-Semitism of the left, since Jews were seen as the chief beneficiaries of the centralized bourgeois state which the Revolution had created. An associate of the Utopian socialist Fourier, Toussaint, attacked the economic power of the Jews in a violent book published in 1844, *Les Juifs rois de l'époque*, whilst the supporters of the revolutionary Blanqui and Proudhon himself were prodigal with their attacks on the Jews as representative of Jacobin, liberal and bourgeois society.

He has not desperately tried to produce some new and tortuous theory which will solve all the mysteries of this complicated matter. Indeed he has some interesting things to say about the motivations of those who go in for these ingenuities. They usually start from the legitimate assumption that the man who wrote the document which first revealed the existence of a traitor, namely Commandant Esterhazy, could not have revealed important secrets to the Germans because he was not in a position to do so. But from there these historians give themselves free rein to interpret the *Affaire* as they wish to.

For some the real traitor was a certain Maurice Weil, whose wife was the mistress of the influential and important General Saussier. This is to say that if the traitor were not the Jewish Dreyfus, then it was the Jewish Weil. For others, Esterhazy was either a French agent or a double agent. Whichever it was, he had to be protected, and while it was unfortunate that Dreyfus was convicted, to have reopened the case would have "blown" Esterhazy. This has the advantage of suggesting that the French army, in the form of its commanding officers, behaved properly throughout.

If Bredin does not bring new discoveries and follows one or two earlier historians in their elucidations of the *Affaire*, he does place emphasis on a number of aspects which have been neglected. The one is the role of chance. It seems obvious to say that if the German military attaché had not been so careless and not have thrown incriminating documents into his wastepaper basket, from which they

## Scapegoats of the revolution



Jean-Marie Le Pen: leader of the French National Front

### Douglas Johnson discusses the background to the present wave of anti-Semitism in France

Once the Third Republic was definitively established it became associated with the parliamentary opportunists, the chief of whom was Jules Ferry. Ferry's achievements were two: the establishment of lay education and the attack on Catholic schools (a work for which his advisers were supposedly Protestant or Jewish); the conquest of overseas territories which diverted French attention and energy away from the thin blue line of the Vosges and which benefited only the financiers and the speculators, many of whom were Jewish. Thus the attack on the parliamentary system and on the whole edifice of the Republic was accompanied by a revival of anti-Semitism. This was present in the movement led by General Boulanger,

as it was encouraged both by the scandal which surrounded the construction of the Panama Canal when it seemed that the whole of the Chamber of Deputies was being bribed by Jewish financiers not to ask embarrassing questions, and by the Dreyfus affair when it seemed that the army itself was being attacked by organized Jewry. Ludicrous contributions to anti-Semitism were made during this period, such as the "proof" that Christ was not Jewish but Celtic, or the "proof" that Bishop Cauchon, who had tried Joan of Arc, was Jewish. But one has to notice that even the Social Catholics took part in these attacks on Jews as upholders of individualism and Semitism. This was present in the movement led by General Boulanger,



January 5, 1895: Dreyfus is humiliated before the Paris regiments.

could be so easily recuperated. . . It seems obvious to say that if only Dreyfus's handwriting had not resembled that of the incriminating document. . . But, in fact, the whole mechanism of the accusation against Dreyfus and his condemnation has often been depicted as being automatic, so it is as well to remember the element of chance. Captain Dreyfus's brother, Mathieu, would never have known that the military judges had been shown documents which were unknown to the defence, had he not been in touch with a strange doctor in Le Havre. This doctor practised hypnosis on a local peasant girl who had "revealed" about Dreyfus, hence his contact with Mathieu. But the doctor was also a friend of the President of the Republic, Félix Faure, who told him of this secret communication of documents. Thus Mathieu, and his lawyers had something to work on in the process of proving Dreyfus innocent.

Bredin emphasizes too the role of the military hierarchy. Once something had been decided then it was believed (and the irony was that Dreyfus himself was very respectful of this). There was the ambiguous role of the press. Without the revelations in the newspapers Dreyfus would never have been cleared but nor would he have been sent to prison in the first place.

Bredin's main contention though is that although there were socialist leaders and socialist supporters who were ready to believe that a wealthy army captain was a traitor and who were reluctant to work on his behalf, the upshot of the whole *Affaire* might have brought French socialists into a bourgeois system of government and thereby changed the nature of their socialism. But the contention is that however anti-Semitism may be a populist or petit-bourgeois, no Socialist party, indeed no party of the left, can consistently or openly hold anti-Semitic discourse. The tragic figure of Dreyfus gets in the way. Anti-Semitism is seen to equal injustice.

There would seem to be straightforward historical explanations for these developments. The Catholic Church had suffered under the Revolution; it counted its dead in thousands and it looked for somebody that could be held to be responsible. When, towards the end of the nineteenth century, the Church was again attacked and persecuted, then it was natural enough that the blame should again be put on the Jews (as Jewish financiers were blamed for the ruin of the Catholic bank, l'Union Generale in 1882).

Then, as Paris had grown and prospered, as the industrial revolution had spread, the idea grew that France was no longer the old France and it is no accident that the most successful publicist of French anti-Semitism, Drumont, should have written his first book on *Vieille Paris*, claiming that the French would soon be made to feel foreigners in their own capital city. It was the Jew who presided over the destruction of moral values, as it was the Jew who was said to typify the rootless populations which filled the growing cities. Anti-Semitism suited all those who wished to impose a different sort of changes on French society. Would-be revolutionaries claimed that they were opposed both to the Jew-Moses and to the Jew-Jesus. Would-be reactionaries claimed that their struggle was both against the Jew-Rothschild and the Jew-Murx.

During the inter-war years, perhaps the most important feature in the history of French Jews was the extent of immigration. In Paris, some 70,000 Jews from Central Europe (not counting the *ghetto* Jews) had completed the swamping of the Sephardic Jews which had begun in the 1880s. There were those like Giroudoux who were later to claim, in 1940, that it was the influx of these Jews from Eastern Europe which destabilized the French internal situation. Others claim that it was because so many of the Jews came, after 1870, from Alsace and Lorraine, or after 1933, from Germany, that they were easily associated with the German. The French, it was said, were not frightened of the Jews but they were frightened of the Germans and they thought that the Jews were German. Two Polish Jews were manhandled at the Gare de l'Est in September 1938, because their Yiddish was mistaken for German and they were thought to be making pro-Nazi remarks. Those who tried to make contact with the Jews in Paris, such as the Communist Party, working above all among those of the Belleville district, were suspicious of Yiddish culture which they regarded as dangerously subtle and individualistic. They wanted a definitive choice made between being a Jew and a communist, but it is said that after 1937 they became less anxious to recruit from this area as they became aware of the hostility to the Jews among their militants, particularly as unemployment had grown in the clothing industry.

Of the immigrants, perhaps only one-fifth returned from the concentration camps or survived the persecution of the German occupation. As is well known, there were occasions when the French authorities showed greater zeal than the Germans in rounding up Jews. Was it an emotional reaction, to blame the defeat of France on the presence of so many supposedly non-French elements? Was it a calculation, to protect the French by sacrificing the Jews? But with the Liberation, there was a curious silence about what happened to the French Jews. Aron tells us of a conversation he once had with Sartre, discussing the absence of any newspaper or review article, welcoming the return of the Jews.

Is this an instance of how, in the ideas of the period, all thought was directed toward mankind in general, and would not accommodate itself to the existence of particularities, especially the obstinate particularity of the Jew? To this, and in contradiction to this, was later added an insistence upon the particularity of nationalism, which was associated with de Gaulle who would not accept that there were those who thought of themselves as Jewish rather than French, any more than he could accept Zionism. Thus, in both strands of thought, the French Jew, found himself isolated. The immigration into Paris alone of some 200,000 Sephardic Jews from North Africa reverses what happened prior to 1939, but once again gives material to those who are anti-liberal and anti-Semitic because of some so-called ideology and to those who are populist and who would claim to be anti-Semitic by experience.

The author is professor of French history at University College, London.

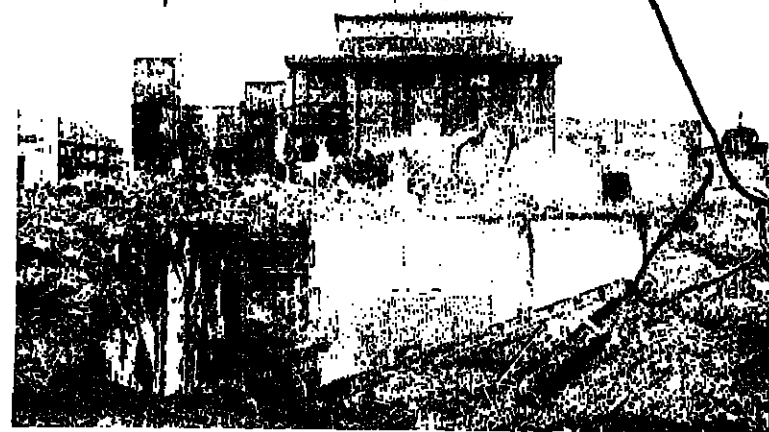


## John Herson and Chris Couch compare two major redevelopment projects in Britain and Germany

At first sight there is little similarity between the Ruhr and Merseyside. The inland Ruhr is dominated still by coal-mining, steel production and engineering, while coastal Merseyside focuses on the docks, port-related industry and commerce. Look beyond these superficial impressions, however, and the two regions have major similarities. Both suffer from a long-term decline of their economic base which has been exacerbated by the world recession. Over 170 collieries have been closed in the Ruhr since 1948 and the steel industry has seen major rationalization; further closures are inevitable. On Merseyside the docks have suffered major contraction so that dock employment has fallen from 16,000 in 1953 to around 2,000 today. Even the new industries brought to Merseyside through regional policy in the 1960s are now cutting back workforces and closing plants. The economic collapse which affects both areas has brought high and rising unemployment and a burgeoning problem of derelict land and buildings. It has also set in motion intense political debate about what should be done.

One focal point of this debate is whether local authorities have the ability to reclaim derelict land for development which will help regenerate the local economy. In both countries the answer emerges to be an interim "no", though this is clearer in Britain than in Germany. On Merseyside the Conservative Government set up the Merseyside Development Corporation in 1981 to deal with the problem of derelict docklands, while in the same year the *Land* government of North-Rhine Westphalia established the *Gründungsstiftung* Ruhr programme to reclaim derelict collieries, steelworks and other industrial sites. The two programmes make very similar comparisons for an international comparison. They were started at almost the same time, they involve very similar amounts of money and strong political considerations led to their establishment.

The work of the Merseyside Development Corporation has had considerable publicity. It was given wide



The old DAB brewery in Dortmund and the new brewery which was financed by the sale of the demolition site at an exorbitant price



## The regeneration game

powers to acquire, reclaim and develop the docks and adjacent sites, together with exclusive land use planning powers over its area. In the first two years more than £27m came from the Department of the Environment to finance these activities, and an annual budget of around £27m is anticipated for the rest of the MDC's 10 year life. These powers and resources have enabled the MDC to act rapidly, schemes for the creation of advance factory estates, small enterprise workshops (in collaboration with British-American Tobacco), the Albert Dock redevelopment and perhaps most famously, the Liverpool International Garden Festival this year have all contributed to a high profile and a commercially aggressive approach.

The *Gründungsstiftung* Ruhr (GSF) has a different organizational structure from the MDC. It is not a new agency; it is a new programme administered by existing agencies and closely tied into existing constitutional structures. Furthermore, the GSF is not seen as an isolated initiative (as the MDC ends up being). It forms part of North-Rhine Westphalia's five year "Ruhr Action Programme" designed to help the area's regeneration on a number of fronts. In the GSF responsibility for purchasing, reclaiming and selling derelict land lies with the *Landesentwicklungsgesellschaft* (LEG), a housing and land development company owned largely by public agencies. Although the LEG has considerable autonomy in its day-to-day activities, this is constrained by the need to get *Land* government approval for each reclamation scheme proposed, while the local authorities retain planning control and therefore have the final say on what developments are permitted. In essence the GSF is more democratically accountable than the MDC.

Unlike the MDC, with its small area

concentration on the Merseyside docks, the GSF programme operates throughout the Ruhr conurbation, and sites for reclamation are chosen partly on the basis of priority but also partly to ensure, for political reasons, that as many local authorities as possible get a share of the resources. DM500m was allocated to the GSF for its planned five-year life span, but government expenditure cuts have now meant the money will be spent over a longer period. The programme is also being extended to other parts of North-Rhine Westphalia. Up to December 1983 25 sites, totalling 400 hectares, had been purchased through the GSF. Unlike the MDC they LEG aims to sell its reclaimed sites in order to plough back money into new schemes, though experience is showing that the reclamation process loses money substantially.

Two sites in Dortmund give a flavour of the GSF's activities. The Hoersch Union site covers 36 hectares stretching north-west from the city centre; it was formerly a steelworks closed through rationalization. Purchased for DM12.6m (DM35 per square metre), the site has been rapidly reclaimed for industrial use. The LEG is hoping to sell the land for between DM450 and DM65 per square metre in order to break even on the development (allowing for demolition and infrastructure costs). The market price for industrial land in Dortmund is, however, only DM20-40 per square metre, and the LEG is obviously being over-optimistic to expect more. Furthermore, it may end up in conflict with the city council if it attempts to get higher-paying commercial uses (eg a hypermarket) on the site. The fundamental problem is that there is already an oversupply of industrial land in the area; an expensive reclaimed addition to it is not needed.

The second site, the former Dortmund Action brewery (DAB), is altogether more notorious. In 1981 the site was not derelict. The brewery, the biggest in Germany, was still in operation but the company wanted to concentrate production at another brewery in the city and was looking for ways to finance the expanded plant that would be needed there. Through obscure political pressures at the highest level, the LEG was ordered to purchase the old brewery at the exorbitant price of DM650 per square metre; it then had the even more expensive task of demolishing the buildings and filling in the lagging cellars which riddle the site so that it could be redeveloped for cheap rented housing. The whole exercise has been grossly uneconomic, but DAB now has its new brewery built largely at public expense while retaining a fig-leaf over the policy that direct subsidization of private industrial investment does not occur in Germany. It is now being said, however, that a repeat of the DAB episode will not be allowed to happen. Another Dortmund brewery which was slower off the mark received a rebuff from the *Land* government.

Similarities and differences between the GSF and the MDC were explored recently at a seminar at Dortmund University funded by the Anglo-German Foundation for the Study of Industrial Society. German participants, who came from a wide range of agencies connected with the GSF, found much to impress them about the MDC. Its success in redeveloping rapidly the docks and the genuine advantage of having a single agency with wide powers and autonomy. Particular policies, such as the small enterprise workshops with communal back-up services, were felt to have possible application in the Ruhr.

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Nevertheless, the overall feeling was that an agency like the MDC was neither feasible nor desirable in the Ruhr. Its sweeping powers and lack of democratic accountability were seen as too high a price to pay for the reclamation of derelict land; there was surprise and disquiet that the British Government was prepared to make significant constitutional innovations in pursuit of essentially short-term political objectives. The whittling away of local authority powers was criticized. On the other hand, our own study of the two programmes indicates that although the GSF ostensibly operates within a more democratic framework, key financial decisions (such as the purchase price of sites) are subject to less accountability than would be the case in Britain.

Despite their different organizational forms and geographical spread certain common features can be seen in the MDC and GSF experiments. First, it is clear that their job creation impact is feeble in relation to job loss in the two regions; most of the firms which occupy the reclaimed sites are small and relocating from elsewhere in the conurbation. Secondly, publicly funded creation of new industrial land in areas already having a surplus of it is bound to have effects on the existing land market. These effects are not being monitored in either country.

Caution is needed in transferring the apparent lessons of one country's policies to another with different social, economic and political circumstances. From the British perspective, though, one lesson that might be learned from the Ruhr programme is that similar results can be achieved to those of the MDC without the need for constitutional innovations with little democratic accountability. To reclaim derelict land local authorities may need support rather than replacement.

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## Planning planning Michael Bruton and John Glasson on the virtues of planning education

Planning education has been the subject of considerable review and "rationalization" in recent years. Arising out of the University Grants Committee exercise of 1981/82, the school of planning at the University of Aston was closed; as a result of the recent (1983) National Advisory Body review, three departments are due to be closed - Gloucestershire College of Arts and Technology, Liverpool Polytechnic and Trent Polytechnic. Despite the cuts of the last two years, there is serious talk of further cuts to reduce even more the number of graduates produced from professionally recognized planning courses.

It is difficult to repair the damage already done, but it is not too late to avoid making the same mistakes a second time. Planning and planning education have a significant role to play in the future of our society. What is needed now is a period of stability. There is also a need for a clear recognition of the strengths of this form of education and its benefits for society.

Society needs graduates who are flexible, adaptable and equipped with a problem-solving capability, and who are capable of communicating their ideas to those who will be affected by any decisions made. Graduates from town planning courses possess precisely these qualities; to the extent that their contribution to the economic and social development of the country far outweighs the cost of their production.

The rationale for reducing the number of planning graduates produced through the English and Welsh higher education systems is, largely based on a manpower forecasting exercise carried out by Inlogov for the Social Science Research Council generally referred to as the *Aston Research Manpower Forecasting* exercises are seldom reliable. Indeed the manpower forecasting exercise conducted for SSRC by Inlogov in the early 1970s at the time of local government reorganization was partly responsible for the current level of

provision of town planning graduates (the Edlison-Earwick report).

In our experience, whenever such exercises have been slavishly implemented by increasing or reducing supply to match expected demand, they are soon shown to be in error. The world has a nasty habit of changing far more rapidly than institutions can adjust to the change. When we are talking about absolutely small numbers of planning graduates (400 a year approximately UK and EEC graduates) the whole exercise of the NAB cuts is brought into perspective.

There are a number of weaknesses in the *Amos Inlogov* forecasting exercise which should be clarified. There is a narrow conception of the job market for planners. The forecasts, based largely on anticipated employment prospects in town planning departments of local authorities, ignore the fact that many planning students go into a much wider range of public and private sector jobs, with environmental, economic and land bases and which require a professional planning input. In particular, the estimates quite missed the expanding private sector demand.

The forecasts also underestimated the wastage of trained students (eg women leaving work for child-bearing; some who never go into planning; planning staff in practice following the wave of early retirements affecting local authorities. In addition, given the flexible structure of undergraduate courses, a proportion of students take advantage of the grounding provided in the environmental, design and social science aspects of these courses, and deliberately choose to move into other areas on graduation.

Even if a narrow view of what planning involves is taken, there are strong arguments as to why planning graduates should be produced at a level which exceeds that currently proposed by NAB and the Government. For example, there is an important need to conserve our national heritage

The quality of many of our towns and cities and the beauty of our countryside, with its National Parks, Areas of Outstanding Natural Beauty and Country Parks, has been well served by planning for many years. It would be a great loss to society, and to our tourist trade, if our national heritage was allowed to suffer through over casual procedures and the lack of qualified manpower.

The modern planners' skills are not limited to situations of responding to the initiatives of others. Today's planners are increasingly the facilitators of economic development, the identifiers of opportunities for the private and public sectors, and quite often the catalyst bringing together private and public sector resources in the interests of the community.

The Economic Development Unit at South Glamorgan County Council is a good example of this type of activity in the public sector. This unit is concerned to promote the economy of South Glamorgan and, among its current priorities, is regeneration of Misan to the area and the regeneration of the Cardiff docklands. The team is led by a town planner and four of the eight professional staff are also qualified town planners.

How can we argue that there is not a key role for planning when we turn to the problems of our inner cities? Such areas are begging for more, not less, attention. The unemployed, especially young adults, living in depressing and derelict environments, where services have been eroded and hope is all but gone, are desperate. The whole situation is a desperate one. To reduce the number of graduates endowed with these capabilities will save little and cost much.

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John Glasson is head of department of town planning at Oxford Polytechnic.

With regard to employment, over the last three years, which have not been the best of times for new graduates, at least 90 per cent of our students have secured employment in planning related activities within six months of graduation. Because of the small marketability of planning graduates, employment outlets are not narrowly concentrated but cover a range of professional jobs in both the public and private sector.

Our courses allow specialization in fields of contemporary market relevance (eg industrial and commercial development, transport planning, housing, recreation and resource management). Our graduates work in a multitude of outlets and many have achieved high standing in international agencies such as the EEC. The attraction and marketability of our courses is also reflected in high levels of overseas demand, from developing countries, but increasingly from students from our partners in Western Europe. By comparison with the science and engineering world generally, our graduates are cheaper to produce and are relatively more successful in obtaining employment.

The applied capabilities developed through planning courses; the real world awareness developed in these courses; the communicative and numerative skills cultivated; the demands of having to solve problems within social, economic, political and physical constraints - these are factors which develop skills of judgment, negotiation, compromise and team work - skills which are not always evident in other graduates, yet which are so essential to the development and improvement of our way of life. To reduce the number of graduates endowed with these capabilities will save little and cost much.

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## by Robert Wokler

*That Noble Science of Politics: a study in nineteenth-century intellectual history* by Stefan Collini, Donald Winch, and John Burrow  
Cambridge University Press, £25.00 and £9.95  
ISBN 0 521 25762 X and 2770 1

Most students of politics today complete their degrees in a subject called "political science", but few take any more notice of the scientific credentials of their course than does the Secretary of State for Education. In the eighteenth century, by contrast, political thinkers of almost every persuasion saw themselves as engaged in laying the groundwork of a science of legislation, and only when the first principles of such a science were deemed to have been realized in the French Revolution was their sinister practical fulfilment judged a defect of the science itself.

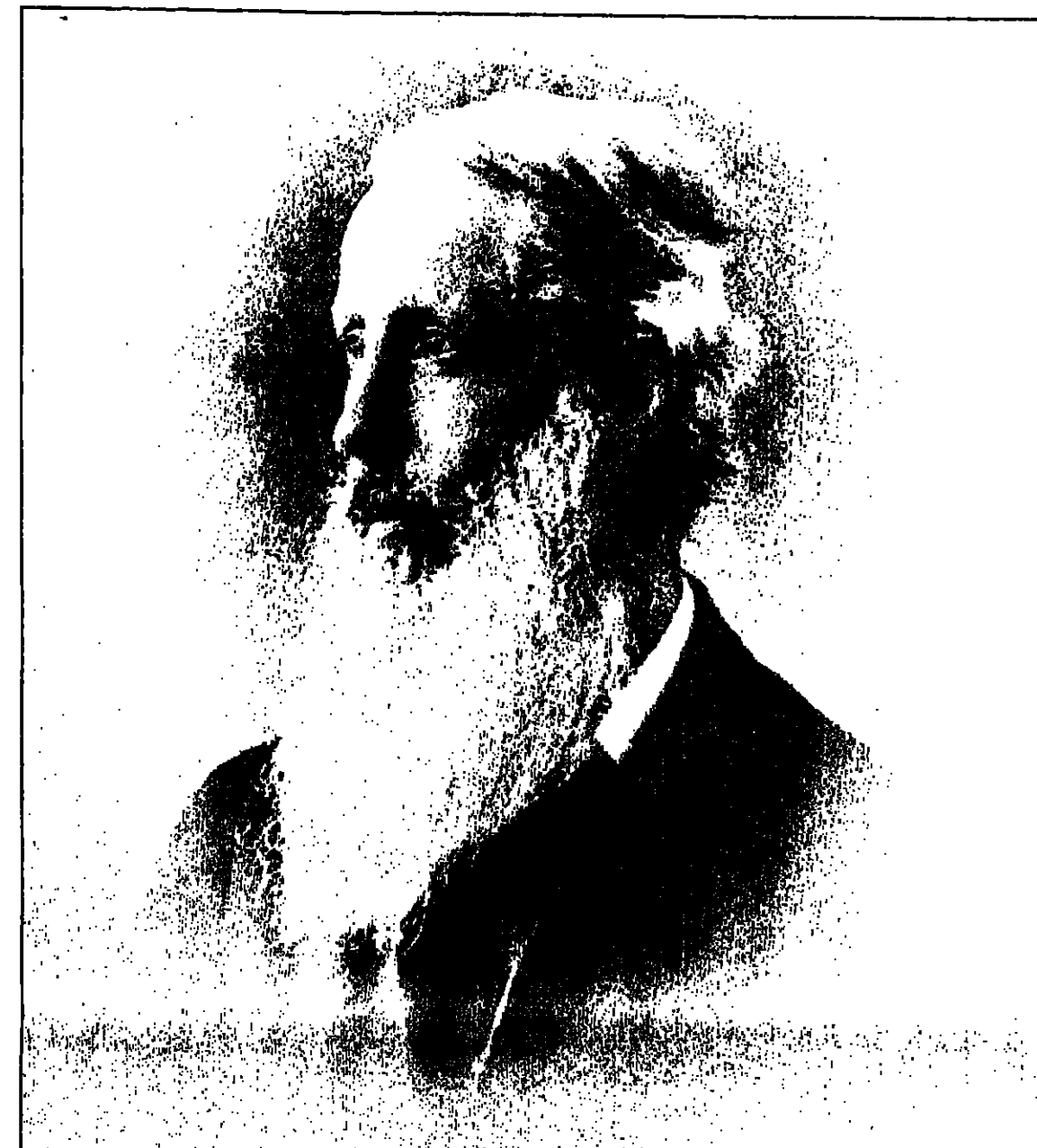
The heady enthusiasm which in the Enlightenment had marked many of the contributions to political science waned dramatically in post-revolutionary Europe, with the great scientific-minded optimists of the nineteenth century turning their attention instead to the economy or society in general, from which, they believed, their predecessors had wrongly separated and elevated an independent system of government. This was as true of John Stuart Mill in England as of Comte and Marx on the Continent, and the foundations of the sociologies these and other thinkers constructed were seen to have been built upon the ashes of a science of politics burnt out with the demise of Napoleonic France.

In that scenario there is a predominantly British component as well, inherited partly from Edmund Burke and manifested in a pragmatic Whiggish disdain, because of its impermanence to politics, of scientific method and utopian theory alike. Contempt for the excess doctrinal baggage of science actually forms a more central theme in the intellectual life of Britain in the nineteenth century than in any other European country, and such discomfort - as articulated in T. B. Macaulay's critique of James Mill, or Walter Bagehot's animadversions on Richard Cobden, or Arnold Toynbee's and W. J. Ashley's distrust of David Ricardo - yields a rich seam of ideas uncovered in this magisterial account of nineteenth-century British political thought.

The longer Henry Sidgwick studied the brochures for utopia, remark the authors, "the more he warmed to the idea of staying at home" - a precept which Collini, Winch and Burrow occasionally seem to have taken to heart themselves. Variants of Sidgwick's solidly reassuring scepticism, born less of insularity than of immensely thoughtful and widely read misgivings about excessively deductive doctrines, inform a good part of the political tradition the authors investigate here, and in smaller measure, it even seems to inspire their own outlook upon the subject.

One of the most compelling features of this work is its detailed portrayal of distinctive modes of political reflection among authors commonly supposed, when they are remembered at all, to have been averse or unresponsive to the claims of science. Yet the book's title "That noble science of politics" is actually taken from an epitaph of Macaulay which the authors remark, shared many of the aims of the Philosophic Radicals he lampooned. Not only did his accounts of the British Constitution and of the joint rise of commerce and liberty draw much of their force from an extraordinarily similar "idea of Progress", but like James Mill, too, though less abstractly, Macaulay endorsed in the most fulsome terms a philosophy of politics for legislators and administrators which he described as an "experimental science" of government.

Bagehot, moreover, even allowing that his *Physics and Politics* was uncharacteristic of his writings in general - was also deeply concerned with what he called the "substance of political



Henry Sidgwick: "the longer he studied the brochures for utopia, the more he warmed to the idea of staying at home"

science": the management of an age according to its highest thought, such as had been achieved by the younger Pitt, who had "read, understood, and valued" Adam Smith's *Wealth of Nations*. E. A. Freeman in Oxford and Sir John Seeley in Cambridge, while keeping Spencerian sociology "at arm's length", were each committed instead to a specifically political science conceived along quite different lines. Freeman to the detailed study of comparative politics, Seeley to an inductive science of government which viewed the past as a guide to current policy and whose acceptance would turn the Cambridge history tripos into a "school of statesmanship". Notwithstanding their differences, most of the writers considered here agreed entirely with Sidgwick's advocacy of a science of politics that was systematic, definite, and, above all, of practical utility in the intellectual training of a citizen. The manifold conceptions of that science in nineteenth-century Britain and its curious demise in the twentieth-century university syllabus of political science form the principal subject of this work.

The story is brilliantly and expertly assembled, first mainly by Winch, then Burrow, and finally Collini, with one exception pieced together almost seamlessly by a shared interpretation of an invisible hand, acknowledged by the other authors to be that of Collini. It dawns with the dusk of political science in late eighteenth-century Scotland, where for a time the teaching of moral philosophy linked with conjectural history nourished a truly noble science of politics in a university curriculum unique in Europe. Too often it is presumed that the cultivation of this science ceased with the decay of the Scottish Enlightenment, but the authors contend that through David Stewart, disciple of Smith and Thomas Reid in Glasgow and successor to Adam Ferguson in Edinburgh, it in fact achieved one of its most vigorous formulations around the turn of

the century. For the course on political science which Stewart initially mounted then was without parallel anywhere else in Britain, and its concern with "enlightening the policy of actual legislators" attracted students from afar and won their enthusiastic tribute. All the founders of the *Edinburgh Review* attended Stewart's lectures, and their journal was to draw much inspiration from him. So too did James Mill, who claimed to have acquired from Stewart, with some assistance from John Millar, his lifelong taste for the study of politics. The authors place some emphasis upon this link of Mill to Scottish thought, which establishes a pedigree of his ideas that for once circumvents the influence of Jeremy Bentham, largely indifferent to the attractions of highland political science, and in this cast of alter-egos of the nineteenth century very much a minor figure.

The dispute between Thomas Malthus and David Ricardo, here portrayed as less markedly doctrinal than generally assumed, is also credited with a Scottish source in the political economy of Smith, while the writings of James Mill of course introduced the controversy between Whigs and Philosophic Radicals, again shown to be underpinned by some common assumptions. All of this is recounted by Winch with great authority and admirable gusto, but perhaps the most illuminating chapters, on the pragmatism of Macaulay, the comparative methods of Freeman and Seeley, and the economic histories of Toynbee, J. E. T. Rogers, William Cunningham and Ashley, come later. Some of that material is anticipated by John Burrow in his *Liberal Descent*, but it is no less revealing in a different context here, developed and refined by Collini as well.

Chapter seven, on the "Comparative Method" is particularly brilliant and a delight to read, largely because of its generational contrast between Seeley's imperial attraction to Baron

vom Stein's *Realpolitik* as against Freeman's nationalist love of German Romantic *Rechtsgeschichte*. A notable section on James Bryce - that Scotsman born in Ireland inspired by a Frenchman and chiefly remembered for his remarks on America - also figures prominently and rightly among the comparativists.

Yet the most engaging and original chapter of all must surely be Collini's on Sidgwick. Here we find a man who came to perceive utilitarianism's lack of a scientific base and yet was still philosophically wedded to apparently utilitarian goals. More stonily thoughtful perhaps than any other figure in a cast comprised only of thinkers, Sidgwick nevertheless comes alive. His bemused self-reproach for lack of earnestness and his irresolute optimism are drawn by Collini with tender indulgence, as he unravels how Sidgwick's subtly discriminating brand of utilitarianism led him to adopt the modest political principles already implicit in ordinary middle class life. Seldom before can the conscientious dullness of academic integrity have been portrayed so unsolemnly. With Sidgwick, utilitarianism lost its Radical rudder but fortunately remained afloat in a becalmed Philosophic sea.

This chapter and some of the material that follows gently belie the authors' introductory strictures on the impartiality of their style of intellectual history. Sidgwick certainly wins points and secures more than a fair share of their imaginative sympathy, whereas some of his Cambridge followers receive rather short shrift. The earlier chapter on John Stuart Mill, moreover, also by Collini, suggests partisanship of a much harsher sort, distractingly enunciated as it is by parenthetical scolding of Mill's character, intentions, and too long allegiance to "the pedlars of those grand secular theodicies which promised to reconcile the

ways of history to man". That chapter alone, among so many which are superb, does rather less than justice to its subject.

The authors judge the younger Mill to be a distant cousin of most of the other figures they consider, and they are no doubt right to locate part of the reason for his isolation in his francophilia. But the very remoteness of Britain's then preeminent and most widely read political thinker from a study of the science which surrounded him points to a defect of their work unremedied by the authors' eschewal of both social science and political theory. An intellectual history of nineteenth-century British political science in which John Stuart Mill figures only obliquely and Bentham scarcely at all, and from which Herbert Spencer is cast off as a sociologist while T. H. Green, F. H. Bradley and Bernard Bosanquet flounder silently in the wings of political theory, cannot but raise as many questions of importance as are settled by a neglected stand-in troupe. The problem is not just one of restoring familiar worthies to their pedestals and recalling that they read more widely in French and German than Scotch. It is rather that some of their leading lines in political science were scripted for a play from which their parts have been dropped, on the instruction of new directors determined to give the other actors a louder hearing and warmer reception.

Much of this work is devoted to the institutionalization of political science and related disciplines in nineteenth-century Britain. Lawyers found universities and professors inaugurate or are left stranded in chairs at almost every turn, among them Stewart in Edinburgh, Malthus and James Mackintosh at Halesbury, Henry Brougham in London, Seeley in London and Cambridge, and Freeman in Oxford, not forgetting Ashley in Toronto. Sir Henry Maine, Sir Frederick Pollock, James Bryce and Sir Paul Vinogradoff all figure here as Oxbridge professors of law and can each be seen to have concurred with the conviction of Sidgwick at Cambridge that, whatever use may be served by them, "a Professor must write books". Once again Sidgwick holds professorial pride of place, particularly in his splendid suggestion that Canningham, being in Cambridge, might as well find something to do there, perhaps in anti-Ricardian economics unfamiliar to him, for which demand was not so slight as in the neo-Hegelian theology he already knew. Thus was launched the career of one of Britain's leading economic historians of the late nineteenth century.

The general influence of academic Cambridge looms progressively larger as the authors' story unfolds, and it forms the whole subject of Collini's final chapter, in which he recounts how political science was first introduced there by Sidgwick in the moral sciences tripos, then in another form by Seeley in the history tripos, and finally once more by Alfred Marshall in the new economics tripos of 1903. The tale concludes with a sting, however, since in Cambridge political science suffered death by canonization under the first holders of the appropriate chair, Ernest Barker and Sir Denis Brogan, who, respectively, found the discipline in their charge "nebulous" and "possibly non-existent". By then, in the late 1930s, while it had come to figure as a course in other British universities, precious little of what Macaulay and his followers thought noble about it survived.

This work, in its extraordinary incisiveness and breadth of detail, forms much the finest account ever published of British political science. Notwithstanding the authors' self-imposed restricted freedom of choice, it also forms the best historical study of any field in nineteenth-century British political thought since Halsey's *Growth of Philosophic Radicalism*, which, however and sadly, they largely ignore.

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## BOOKS

### Tales of human disaster

*The Cliffs of Solitude: a reading of Robinson Jeffers*  
by Robert Zaller  
Cambridge University Press, £19.50  
ISBN 0 521 25474 4

Born in 1887 in Pittsburgh, the son of a Protestant minister who was both a biblical and a classical scholar, Robinson Jeffers accompanied his family at the age of 16 to California. From 1914 until his death in 1962 he lived at Carmel, some hundred miles south of San Francisco, with his wife, Una, and twin sons but otherwise remote and habitually solitary, off an income derived from a small inheritance and the proceeds of his writing.

His home, "Tor House" with its adjacent "Hawk's Tower", he built himself, of stone hauled up from the beach below; on the land around he planted and continued to plant hundreds of trees. It was a life spent within sound of the ocean and its gulls and within sight of the mountains and their hawks; at night, before retiring to bed, he would walk around the house, checking the stars in their places. Stone, star, tree, mountain, sea, and bird: the sacred presences in Jeffers's poetry, the "permanent things" . . . needful in a poem . . . things continually renewed or always present, the chief emblems of the transhuman beauty, the divine materiality, that he celebrated with such austere devotion throughout his life until the last words of his last volume: "The island rocks and immense ocean beyond, and Lobos/Darkening above the bay: they are beautiful? That is their quality: not mere, not mind, not goodness, but the beauty of God."

That same panorama, however, was also a "coast crying out for tragedy like all beautiful places; and like the passionate spirit of humanity/Pain for its bread." Cosmic beauty coexisted with universal pain; and if Jeffers was regularly inspired by the loveliness of the whole, he was also ever haunted by the suffering of sentient creatures, ridden with guilt or horror at what men and women could do and desire to do to themselves and other animals, and (though less often) stirred by the grandeur of the human spirit in the midst of ubiquitous hurt, when "at stricken moments it can shine terribly against the dark magnificence of things". So, time and again he told tales of human disaster, physically violent and sexually agonized, in the form of some 15 narrative poems, all located in twentieth-century California, and half a dozen dramatic poems, based on Greek, biblical, or Germanic

legend. Taken together, they constitute the bulk of his work, although a majority opinion would have it that the best of Jeffers is to be found either in the many short poems or in excerpts from the longer poems that are in effect detachable lyrics.

It is nevertheless principally to these longer poems that Robert Zaller addresses himself in an excellent book that must henceforth be indispensable to students both of Jeffers and of narrative poetry in general, the virtual demise of which in this century Zaller comments upon intriguingly in his preface. Not only is he unorthodox in concentrating upon the long poems, but he also selects for especially close treatment either the less well-known or the more deeply problematical. From among the earlier work, for instance, rather than the highly considered "Roan Stallion" he examines the seldom discussed "The Coast-Range Christ" and the huge but fragmentary "The Alpine Christ," which was reassembled from Jeffers's manuscripts by the poet William Everson; previously Brother Antoninus, to whom Zaller acknowledges an evident debt.

He meets the more troubling poems from the later work head on, like the longest of all, *The Women at Point Sur*, an exposition of messianic megalomania, to which he assigns a central position in the canon; like "The Bowl of Blood," with its ambivalent, fascinating but necessarily disturbing interpretation of Hitler (in the first years of the war); and like the revolting, literally nauseating "The Love and the Hate," which Zaller, after a cogent reading, has the courage to describe as "the most powerful anti-war poem ever written in America. The Vietnam war, with its near unanimity of protest,

produced nothing remotely comparable to Jeffers's solitary dissent." Zaller's basic procedure is psychoanalytical. The Oedipal relationship is seen to be the theme that unites from first to last Jeffers's stories and dramas of parricide and incest, the lifelong working out of his youthful heritage — a distant, unapproachable, elderly father and a sensible, lively mother, 22 years younger than her husband. The analysis, however, works entirely to construct Jeffers rather than to deconstruct him. He emerges as a major poet, partaking of the tragic and the religious, one for whom "however tainted or compromised, the great religions were the hymns of truth and the well-springs of history, the content and motive of human culture". In conclusion, Zaller relates Jeffers convincingly to "a vast tradition . . . the ancient tragedians and the Stoics, Saxon saga and Elizabethan rhetoric, the English Romantics and the long surf beat of Whitman's line"; while within the smaller context of American culture he is surely right to insist on Jeffers's affinity with his contemporaries in fiction and drama, Faulkner and O'Neill, rather than with his modernist fellow-poets.

For, paradoxically, it is only by recognizing Jeffers's fundamental differences from Pound or Stevens or Williams and by seeking in and from him different gifts that we can recognize what he shares with them; the stature of a great poet.

R. W. Butterfield

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Robinson Jeffers in 1956, photographed by Leigh Wiener

## All passion spent?

*Essays on Detective Fiction*  
edited by Bernard Benstock  
Macmillan, £20.00  
ISBN 0 333 32195 2

The mostly American contributors to this book seem unperturbed by the old puritanic anxieties about popular culture. It is hard to recall the real fervour with which writers like Dorothy L. Sayers were once praised ("definitely among the great writers" — *The Observer*) and condemned. Defenders of serious cultural values like Q. D. Leavis (who described Sayers as "odious", "nauseating", and "vicious" in a memorable *Saturday Review*) regarded the enthusiasm for detective stories as a cultural drag which threatened the fate of literature itself. Misdirected enthusiasm, for writers like Sayers used up the never exactly over-abundant supply of critical intelligence which had better be reserved for more appropriate tasks.

During the Second World War complex, detailed, and often detective stories, consoling the high and mighty as well as the masses, Evelyn Waugh

read Erle Stanley Gardner while serving with the British military mission with the parsons in Yugoslavia. George Orwell, who often shared Mrs Leavis's cultural anxiety if not her tone, published an essay in *Horizon* during the war ("Raffles and Miss Blandish"), in which he compared one of the most popular books of 1940, James Hadley Chase's *No Orchids for Miss Blandish*, with a snobbish turn-of-the-century bestseller, E. W. Hornung's *Raffles*. The popularity of Chase's book seemed to Orwell symptomatic of the brutalization of the reading public, and the acceptance of amoral gangsterism in modern life. In 1945 W. H. Auden described his passion for detective stories as "an addiction like tobacco or alcohol". At the point when this enthusiasm threatened to get out of hand, Edmund Wilson published three rather cranky attacks on the genre and its defenders in *The New Yorker*; reading detective stories was he concluded, "wasteful of time and degrading to the intellect". The ensuing debate brought New York intellectuals of the magnitude of Joseph Wood Krutch and Jacques Barzun into the public prints.

These passions seem remote indeed from the calm and diligent essays collected by Bernard Benstock. He has grouped contributions into four general areas: English "Golden Age" (Agatha Christie, Dorothy L. Sayers,

Ngao Marsh), English contemporaries (P. D. James, Peter Lovesey), Americans (Dashiell Hammett, Raymond Chandler, Ross Macdonald), and Europeans (Nicolas Freeling, Simonon, Sjöwall and Wahlöö). Most of the essays include a checklist of titles, though Eric Mottram mis-dates one book by Ross Macdonald and omits at least five others. The essays on the European writers seem the most interesting. Benstock's essay on the Martin Beck novels of Sjöwall and Wahlöö admirably blends discussion of technique and characterization with a subtle appreciation of the interplay of welfare state and the changing nature of crime in Sweden. Carol Shloss is no less interesting on Nicolas Freeling's Dutch novels. Benstock and Shloss successfully maintain some perspective on their authors, and persuasively argue that the relations between detective and society in the books they discuss are complex, and therefore less crudely available for fantasy. And their works seem less crippled by the conventions of the genre itself.

The writers of the English "Golden Age" pose quite different problems. It is surprisingly hard to say a great deal about the books themselves. The conventions of the genre, which were so wittily interpreted in Auden's essay "The Gullible Voyageur" are at an intellectual level not very interesting

## California here I come

*California Writers: Jack London, John Steinbeck, the tough guys*  
by Stoddard Martin  
Macmillan, £20.00  
ISBN 333 33435 3  
*American Literature and Social Change: William Dean Howells to Arthur Miller*  
by Michael Spindler  
Macmillan, £20.00  
ISBN 0 333 33413 2

The cover of Stoddard Martin's new book surrounds a still from *The Postman Always Rings Twice* (1981 remake) with Art Deco stripes, converging on the spine, and *moderne* lettering that are an indication of the elan and flamboyance with which he approaches his subject.

Taking off from Edmund Wilson's suggestion that the principal modes of Californian fiction are class war studies and exotic fantasies, Dr Martin offers a fascinating, sometimes surprising trip through the landscape of Californian novels as created by Jack London, John Steinbeck, and the "tough guy" writers of the thirties and forties. The exhilaration of the journey derives from Dr Martin's comparisons (Chandler and Hockney), chapter headings ("The Zeitgeist and James M. Cain"), footnotes (the longer items encapsulating whole careers), and general range of reference. Occasionally, the allusiveness is excessive:

two paragraphs on *The Maltese Falcon* manage to mention Wagnerian opera, symbolist drama, Schopenhauerian aesthetics, Tom Wolfe and Ken Kesey! More often, the allusions are illuminating, the style lively and the perspectives fresh.

*California Writers* begins with an examination of the life and work of Jack London, "poet of the closing of the frontier". Neglected novels such as *The Star Rover* and *The Little Lady of the Big House* are reassessed, though the extravagant praise of the latter, inviting comparisons with the work of Fitzgerald and Hemingway, fails to convince. In London's writings, the ideas of Marx, Darwin, Spencer and Nietzsche jostle for prominence; at different times he celebrated the benevolence of socialism and the heroism of individual power. Dr Martin pins down most of these contradictory traits, but fails to take account of London's belief that imperialist ventures and the survival of the fittest must precede a proletarian victory.

More acceptable is the restoration of *The Grapes of Wrath* and *In Dubious Battle* to the tradition of American radical literature. In the case of John Steinbeck, as in that of London, however, radicalism is disguised by racism, and freedom within nature alternates with fame and affluence. The nadir is *East of Eden*, accurately described by Dr Martin as "morbid and perverse", and the resemblances to London suggest themselves once more: sexual anxieties, misogyny, a taste for prostitutes.

The Wilsonian dualism, never suppressed for long, resurfaces with the "tough guys": Gothicism and decadence in Dashiell Hammett and James M. Cain, class and race in *Mildred Pierce* with radicalism in *Farwell, My Lovely*. Yet, in a brilliant section on Raymond Chandler, Dr Martin indicates what may be the novelist's greatest achievement — the vast canvas of Los Angeles, worthy to set beside the fictional cities of Dickens and Balzac.

"Wherever we live/It's California", David Ackles used to sing over a decade ago, while in the nineteenth century Tocqueville observed that in a democracy "men and things are always changing but it is monotonous, because all these changes are alike". In *American Literature and Social Change* Michael Spindler is interested less in the stability of American capitalism and materialism than in the shift in the American economy from production to consumption, a change articulated in certain literary works which appeared between the mid-1880s and the late 1940s.

Dr Spindler takes for his inspiration Marx's claim that social being determines consciousness, and his framework is that of determining base and determined superstructure. The non-problematic nature of this model is underlined by the separation of chapters expounding economic history from those analysing American texts. So this study is more systematic than the kind of literary history Granville Hicks used to write, but nevertheless, it is such works as *The Great Tradition* (1934) that it recalls.

The works of seven significant novelists and one dramatist constitute Dr Spindler's materials, the authors having been chosen for their "assured place in the literary canon". Although the operations of American bourgeois hegemony in propagating a cluster of hedonistic values conducive to consumption are noted, Dr Spindler does not confront the hegemonic process which creates that canon. The multiplicity of references to David Riesman and his books in the chapter on the economy, society and ideologies of consumption underlines the desirability of interrogating the construct "literature". Indeed, a chapter on *The Lonely Crowd* may well have provided a more satisfying conclusion to the survey than a brief and somewhat tired trot through *Death of a Salesman*.

*American Literature and Social Change* is orderly, coherent and marked by critical independence. As an interdisciplinary study and as one which answers Jameson's call for more historicist and sociological criticism of literature, it is doubly welcome; a paperback version would be a valuable aid for students. Whatever its flaws, this is an example of humane scholarship, by means of which the author shows, in Louis Sullivan's words, "that he is a citizen, not a jackey, a true exponent of democracy".

Ralph Willett

Ralph Willett is lecturer in American studies at the University of Hull.



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## BOOKS

### Limited perception

The Encyclopaedia of Psychology  
edited by Rom Harré  
and Roger Lamb  
Blackwell, £55.00  
ISBN 0 631 12663 5

A good dictionary should define terms in an accurate and readily comprehensible way and should include all those to which the potential reader might need to refer. A good encyclopaedia should have the latter virtue and in addition should provide lucid, accurate and readable accounts of the topics covered.

Unfortunately, the editors of *The Encyclopaedia of Psychology* do not indicate the kind of reader at whom the book is aimed and when one examines the contents, one can only conclude that they gave little thought to this question. Most of the entries are too technical for the layman, but many are too elementary even for the undergraduate student of the subject and the coverage is far too erratic to provide a reference book for professional psychologists.

The first sentence in the first entry serves as a warning of what is to come. The definition of "a priori" begins "An

a priori proposition is one that can be known to be true a priori". The poor reader may well wonder whether that proposition is a priori, though if, despite his bafflement, he reads on he does receive a little more enlightenment. Although most of the definitions are better than this one, no attempt is made to cover all the terms used in psychology. To consider words beginning with the letters "pa", a few of the many not to be found are "palaeoneurology", "palaeoanthropology", "Panum's area", "paracousia", "paralalia", and so on.

Even more surprisingly, many technical terms that are in common use in elementary textbooks, such as "stereopsis" or "phrase-structure grammar", receive no mention. The proper names that are included are equally erratic. What is one to make of a book purporting to be an encyclopaedia dictionary of psychology that has entries for Hegel but not Helmholtz, Gurdjieff (one and a half pages) but not Lashley, Julian Huxley but not Thorndike? Since the book is clearly of little use as a dictionary, the criteria used to evaluate it must be those applicable to encyclopaedias.

One criterion is that of accuracy, and here, for the most part, the book's score is about average, but it does have some appalling lapses. For example, in the one and a half pages the editors see fit to devote to "visual perception", the following errors or infelicities occur. The optical image is said to be "reduced" and "blurred" by the lens; the unwary reader may be left with the impression that the function of the lens is to defocus the image. Scene analysis is incorrectly defined, accommodation is said to be a binocular cue to distance,

shadows are said to change their shape with the distance away of the object, size perspective is said to depend on the objects being familiar, and airbrushers are said not to change their apparent size with changes in distance. One would be dismayed if such gross errors appeared in an undergraduate essay, as indeed they well may if students take to reading this book. Many of the other articles are at best misleading. For example, no indication is given that electroconvulsive treatment is nowadays normally given under a general anaesthetic. It is to be hoped that the authors who have written on topics with which I am less familiar have exercised more care.

A second criterion is whether the space allocated to the different topics is reasonably well balanced. Although judgment about this must be to some extent subjective, I feel the balance is almost always idiosyncratic and often wildly wrong. The editors have deliberately included "definitive accounts of the main ideas and schools of fringe psychology" and of "unofficial psychology" practised by "lay-folk". This has led them to some curious entries and equally curious and apparently random omissions. Saint Augustine is in, Saint Paul, Socrates and Lucretius are not. "Hebraic psychology" merits nearly two pages, but there is no separate entry for Christian psychology; and Jesus Christ, who must surely be considered as important a psychologist as Gurdjieff, receives no mention. Gestalt therapy, which is certainly trendy and probably ephemeral, receives ten times as much space as Gestalt psychology which revolutionized the way psychologists thought about

perception and cognition. I sometimes had the impression that the editors have worked on the principle that the more that is known about a topic, the less the space that needs to be devoted to it.

A third criterion is whether an encyclopaedia is written in an attractive and lively style. This one is unlikely to be consulted by anyone looking for information on a particular topic unless his tastes are very exotic, but it might still occupy a useful though rather large position on the lavatory shelf if it were worth browsing through. It is hard to recommend the book even for this purpose. Perhaps because so many of the entries are written by social psychologists who are accustomed to concealing the banality of their thoughts by the pomposity of their prose, much of the book does not make easy reading. A not atypical sentence is "The actions people perform together in, say, managing a discussion, or developing a friendship, or following out the instructions of a superior are assumed to be effective by virtue of their meanings to the actors", which seems to mean no more than the obvious fact that if you want to act better take into account the intentions of your actions on others. The quotation is from a lengthy entry on "ethogenesis" in which the author cites only one "discovery" made by this approach, namely, that when something goes wrong in social intercourse, people tend to think about what is going on. The reader may justifiably wonder whether all the discoveries of ethogenesis are so trivial. The encyclopaedia, then, with a few exceptions, like some of the articles on learning,

will rarely reward the browser. Particularly in the articles on social psychology and related topics, he will find only turgid prose, tedious accounts of methodology and a few discoveries that he will have made for himself at an early age.

A fourth and final criterion is how easy it is to find items in an encyclopaedia and here this one does not do too badly, since there is a comprehensive index. The only problem is that the same topic is often referred to in many different places - there are, for example, 31 entries in the index under "personality" (as compared with the six under "vision"). This problem arises because the entries in the body of the text are often quite unnecessary broken up - there are no fewer than 29 text entries on different aspects of emotion; a few longer articles would have avoided some repetition and perhaps given a more coherent picture of the field.

There is always a tendency for a reviewer to seize upon the weak spots in a volume that has many contributions and there are of course some excellent and interesting articles. But I feel that the blemishes far outweigh the merits and that the editors have often taken too little care to ensure that their contributors wrote in clear and attractive English and that the entries were free from inaccuracies. Before the publication of this book there was no good dictionary or encyclopaedia of psychology; it is a pity that there had none.

Stuart Sutherland

Stuart Sutherland is professor of experimental psychology at the University of Sussex.

## Mental imagery

Imagery and Consciousness  
by P. E. Morris and P. J. Hampson  
Academic Press, £22.50  
ISBN 0 12 507 680 0

Mental imagery is an ubiquitous feature of human experience. From classical times philosophers have always assumed that it would figure prominently on the agenda of any serious attempt to understand the nature of our cognitive faculties. Although this tradition has been maintained in the work of continental psychologists and those of a psychoanalytic persuasion, scientific psychology in Britain and North America has only recently begun to tackle this subject.

With the rise of behaviourism in the early decades of this century, the study of mental imagery was one of the first areas of investigation to be discouraged, and until the 1960s little research of any note was carried out. During the past 20 years, however, the climate has changed considerably. There have been lively controversies about the exact status of mental imagery, in human cognition, and the vast amount of experimental work carried out is reviewed clearly and comprehensively in Morris and Hampson's book.

Current issues are very well identified, including: the distinction between process and representation; the relationship between knowledge and thought; the usefulness of computer metaphors; the overlap between imagery and perception; the notion of a mental model; and the similarities and differences among various types of mental imagery. As an account of current research this is a most useful publication, both for students new to the field and for those who claim a greater degree of familiarity.

The weakest part of the book, however, is undoubtedly the excursion into philosophy with which it begins. The authors offer a rather basic account of the mind-body problem which will be unsatisfying to psychologists, annoying to philosophers, and confusing to students. The concepts of "mind" or "mental experiences" and those of "body" or "physical events" are clearly explained, nor is the crucial notion of the "privacy" of mental experience. Wittgenstein's argument against the possibility of a private language is grossly oversimplified, taken out of context, and dismissed in slightly over one page. At the same time, the authors themselves point out that the ostensive teaching of words depends upon a physical, social and linguistic context, which by definition makes it impossible to teach in the case of a private language.



Illustration for an article on the economics of the international drug trade. From Milton Glaser: graphic design, published by Penguin at £15.95.

No distinction is made between the concepts of imaging and imagining. Ryle's analysis of psychological concepts is rejected as an account of conscious experience, even though he himself acknowledged that it was inapplicable to thoughts, feelings and sensations. Epiphenomenalism is rejected merely because it fails to accord with the authors' conviction that conscious experience "is central to being a living being"; while the double-aspect theory of the relationship between mind and body is accepted because it fits with their claim that "mental experience is what it is like to be a complex system such as a human being, functioning in a certain way". The latter statement is offered as a serious account of the nature of consciousness, despite the authors' earlier denial that any theory can explain what it is really like to be a conscious system. The authors manage to redeem themselves with their own account of the structure of human cognition and the role of conscious experience. It is assumed that there is a single component, "boss", which is in overall control of a person's decisions and actions, supported by "employee" sub-systems responsible for perceptual analysis and response execution. Consciousness is

the awareness of information currently being supplied to "boss".

This is not merely a vague analogy, but is spelt out in some detail. Indeed, this model provides an attractive and compelling, if somewhat artificial, framework which holds together the remainder of the book. It serves to integrate the multifarious types of mental imagery which have been studied, the various characteristics of individual subjects which have been proposed as indicators of their ability or propensity to use mental imagery, the major theories of mental imagery which have been developed during the past decade, and the various properties of the imagery system which have been identified in experimental research. In fact, it is only in the last few chapters, when the authors seem to tire of exploiting the richness of their model, that their text comes down to the level of a mundane literature survey.

The book is generally well written in a lively, enthusiastic style, most of the arguments and allusions being entirely clear.

J. T. E. Richardson

J. T. E. Richardson is senior lecturer in psychology at Brunel University.

## Where the psyche sits

Introduction to Neuropsychology  
by J. Graham Beaumont  
Blackwell Scientific, £15.00 and £8.50  
ISBN 0 632 01103 3 and 01104 1

In 1872, Emil du Bois Raymond delivered a much-discussed paper "On the limits of the knowledge of nature" to a meeting of the German Scientific and Medical Association at Leipzig. "What conceivable connection," he asked, "exists between certain movements of certain atoms in my brain and the undeniable facts that I smell roses, hear organ-sounds, see something red?" Neuropsychology - the currently fashionable name for phenomena - is the best answer we have to du Bois Raymond's question. How good an answer is it?

Graham Beaumont's introduction to human neuropsychology outlines the now incontrovertible evidence that different parts of the brain are differentially involved in the exercise of cognitive, affective and volitional functions. That evidence comes primarily from observations of selective deficit consequent upon (relatively) focal brain lesions. Specialized techniques of lateralized stimulus presentation and recordings of electrical and metabolic activity provide additional corroboration from the normal, intact brain.

Beaumont's portrait of neuropsychological inquiry has many virtues. The book is clear, comprehensive and, for the most part, up-to-date. Considerable care is taken to define essential technical terms, and the writing is refreshingly free from jargon. An impressively wide range of clinical illustrations is described, with aptly selected illustrations of test material and representative examples of the performance of patients with injury to the frontal, temporal, parietal, and occipital lobes; non-invasive techniques for studying hemispheric specialization (dichotic listening and visual half-field presentation) are also well presented.

When experimental findings are weak or contradictory, Beaumont is scrupulous in pointing out the problems and pitfalls associated with particular methods of investigation. The vexed question of individual variation in brain structure and function receives due acknowledgement, and facile generalizations about the cognitive consequences of gender and handedness are avoided.

The book has one flaw. It is, unfortunately, that flaw: it fails. Beaumont totally fails to convey any sense that

the discipline might have some theoretical content. We are presented with data in abundance - patients with lesions here and there cannot do this or that, neurologically intact people show a left ear advantage for this task and so on - but no attempt is made to say why particular constellations of preserved and impaired performance are found. It might be argued that, in an introduction to undergraduates, facts should come first and fancy theories later. To which one must counter that raw data do not merit the honorific designation "facts" until coherent patterns can be seen in them. It might be argued that, in a volume that emphasizes clinical practice, speculation should be subservient to observation. To which one must respond that the eye is blind without the contribution of the mind.

But could it be that Beaumont has simply reflected a depressing state of affairs in which the entire area really has failed to achieve any theoretical understanding of its subject matter? No. From its inception in the late nineteenth century, the founding fathers of modern neuropsychology (Wernicke, Lichtheim, Lippmann and Lissauer) were intensely concerned to interpret disordered language, perception and praxis in terms of adequate psychological models of normal cognitive functioning. Beaumont, by contrast, presents Lichtheim's taxonomy of the aphasias as if it sprang from the air rather than from a closely reasoned analysis of language skills; worse, he ignores the best work of the past decade in which neurologists have attempted, with some success, to reach a deeper understanding of the clinical phenomena that motivated classical theory. Although Beaumont makes fleeting reference to current information-processing approaches to neuropsychology, he provides no examples of the style of argument or of how that style has led to the discovery of intelligible phenomena.

We are admittedly some way from a satisfactory answer to du Bois Raymond's question but not quite so far away as Beaumont's book implies.

J. C. Marshall

J. C. Marshall is a member of the Medical Research Council's external scientific staff at the Radcliffe Infirmary, Oxford.

Routledge & Kegan Paul has published paperback editions of John C. Marshall's *The Human Mind: The Gift of Language*. University of Edinburgh, 1977-1978 at £5.95 and Karl R. Popper and John C. Eccles's *The Self and Its Brain* at £7.95.

A second edition of *Psychology: An undergraduate textbook* by J. M. Darley, Sam Glucksberg, L. J. Kunda and B. A. Kirshlag, has been published by Prentice-Hall at £25.00.

## BOOKS

### Not so much a miracle

Alexander Fleming: the man and the myth  
by Gwyn Macfarlane  
Chatto & Windus, £12.50  
ISBN 0 7011 2683 3

The extraordinary range of honours heaped on Sir Alexander Fleming at home and abroad during the last ten years of his life, and the street names along with many other memorials in many countries, all testify to Fleming's genius and his inestimable gift to mankind - penicillin.

Reference books in almost every tongue tell the romantic story of the humble Scottish country boy who became a distinguished bacteriologist after notching the destruction of bacterial colonies by a mould which had contaminated one of his cultures. Only after a 12-year struggle against scientific and medical apathy - or even active opposition - was the shy but brilliant Fleming able to achieve his dream of producing enough penicillin to cure countless infected patients.

A realization that almost every detail of this inspiring story is incorrect began to dawn in 1970 with the publication of *The Birth of Penicillin* by Ronald Hare, who had been a colleague of Fleming at the relevant time. Hare showed that it is impossible to discover penicillin in the manner described in Fleming's celebrated paper of 1929. *Penicillium* mould cannot cause the dissolution of mature staphylococcal colonies but has to grow either before or simultaneously with the bacteria, whose actively dividing cells are then lysed.

The most likely sequence of events, reconstructed by Hare, was that in late July 1928 Fleming inoculated an agar medium with staphylococci; he then went on holiday without incubating the culture. Meteorological records show that after an initial cool spell - ideal for the growth of the mould and the production of penicillin - the ambient temperature rose to about 26°C on August 6 to promote the multiplication of the dormant staphylococcal cells. The results of the interaction were evident, though misinterpreted, when Fleming returned to his laboratory about a month later. Fortunately his mind was prepared for this finding by his somewhat abortive earlier studies on the enzyme, lysozyme, which he had discovered in nasal mucus in 1922. He therefore subcultured the mould and carried out sound investigations on its antibacterial activity.

Fleming was apparently unaware that this effect of some varieties of *Penicillium* has been known since 1871 when Joseph Lister fully described and explained it. Although Lister and several of the numerous investigators of this phenomenon between 1871 and



Fleming being carried in triumph after his installation as Rector of Edinburgh University in 1952.

1928 even attempted to apply it in the treatment of human infection, their types of mould seem to have been less powerful producers of antibiotic than Fleming's.

Despite later assertions, Fleming had little or no interest in the therapeutic possibilities of penicillin. He made no attempt to test his crude antibiotic in infected animals, although he showed that the stuff was remarkably harmless. His interest in penicillin was a useful means of suppressing unwanted bacteria when he was preparing vaccines containing such delicate species as *Bacillus* (now *Haemophilus*) influenzae.

Heavily Fleming's paper and a cult of his mould in 1928 attracted the attention of Ernst Chain who was working as an assistant to Howard Florey in Oxford. By coincidence Chain had just completed a study in which he had elucidated the action of Fleming's lysozyme, and he was searching for comparable agents which could dissolve bacterial cell walls. Chain began to investigate penicillin because of Fleming's erroneous description of its action. Joined by Norman Heatley and others, Florey's team had by 1940 produced substantial amounts of relatively pure stable penicillin and had carried out the all important demonstration of the drug's remarkable efficacy in animal infections.

Only in September 1941, after heroic efforts to produce enough penicillin for the treatment of dangerously infected human patients had led to the second paper by Florey's group in *The Lancet*, did Fleming show any interest in penicillin therapy and carried that he visited Florey and carried away with him a sample of the antibiotic; but it was a year later before he first injected penicillin into a patient - curing a family friend who was dying of meningitis. This single case acted as a catalyst for a press fanfare that established the legend of Fleming as the virtually single-handed benefactor of mankind.

Professor Gwyn Macfarlane, a former colleague of Florey, is uniquely qualified to describe and explain these remarkable events. After publishing a splendid biography of Florey (*Howard Florey: the making of a great scientist*, Oxford University Press, 1979) he has in his latest book provided us with a long-awaited balanced evaluation of Fleming. This convincingly corrects the misleading picture created by the press campaign that began in late August 1942 and was subsequently reinforced by seven adulatory biographies and many other forms of publicity which continued to appear long after Fleming's death in 1955.

Macfarlane depicts a likable yet paradoxical man, Taciturn and unemotional, but oddly gregarious rather than shy. Fleming revelled in public acclaim and became a tireless ambassador for British medical science throughout the world. Although he was a highly accomplished technician his latest biographer judges him to have been no genius but a worthy if colourless professor who "had the trappings of greatness thrust upon him in 1945, at the age of sixty-four" (a year of honours which culminated in the receipt of the Nobel prize for medicine jointly with Florey and Chain).

Apart from exploring the mysteries of genius and greatness in science, Macfarlane brings to life the strangely obscure place in British academic medicine that extended from the end of the last century until the 1930s. This was an era which was personified at St Mary's Hospital by the formidable Sir Almroth Wright, alias Sir Colenso Riegan of Bernard Shaw's *The Doctor's Dilemma*, and by his disciple the outwardly dour Alec Fleming - affectionately and aptly known as "Flem" to all his colleagues.

Sydney Selwyn

Sydney Selwyn is professor of medical microbiology in the University of London at Charing Cross and Westminster Medical Schools.

## Systematic programs

Algorithmic Language and Program Development  
by F. L. Bauer and Hans Wössner  
Springer, DM79.00  
ISBN 3 540 11148 4

The pressing need for more effective ways of producing reliable computer programs is reflected in the emphasis given to software technology in recent initiatives, such as the research effort in Britain based on the findings of the Aivory report. As part of the solution to this problem, it is fruitful to examine in detail the way programs are constructed and how one representation of a program may be transformed into another. An ultimate objective of such work is to develop ways of mechanizing the production of computer programs from their specifications.

Bauer and Wössner have been engaged for some years with colleagues in a major research project in formal transformations of computer programs at the Technical University of Munich. In producing the present text their detailed knowledge of formal program transformations has been applied with great effectiveness to the problem of explaining general ideas underlying a range of contemporary programming languages. The end result is an elegantly constructed and scholarly advanced text on the principles of algorithmic languages. The depth of coverage makes the book eminently suitable for use in postgraduate teaching and as an introduction to the literature for prospective researchers although the authors express the hope that it may also guide those teaching at an introductory level.

The main body of the book is divided into three parts. From a discussion of constructs applicable to an "applicativ" programming style the reader is led first to a consideration of program variables and other characteristics of "procedural" style and finally to a discussion of such constructs as pointers that typify much of the work of the three parts of the book are linked by the use of program transformations to show how different constructs are related. This didactic use of program transformations is remarkably successful both in explaining underlying ideas and in concentrating the reader's mind throughout on the use of a programming language as a vehicle for describing algorithms. There are frequent references to the literature, particularly on relevant theoretical background. Some exercises are included but these are unevenly distributed and lack notes on solutions. Unfortunately there are some infelicities in the English translation. Inevitably there are gaps; for example, parallelism is treated only in the context of interference between program variables, and logic programming is not mentioned at all.

With the rapid recent development of computer science there is inevitably a shortage of well-conceived advanced texts. This book deserves to have a lasting influence on teaching at all levels as well as provoking further thought on the place of formal transformations in systematic program development.

Peter Wallis

Peter Wallis is lecturer in computing at the University of Bath.

## What's behind the signals

Animal Behaviour  
edited by T. R. Halliday  
and P. J. B. Slater  
Volume one: Causes and Effects  
Blackwell Scientific, £15.00 and £7.50  
ISBN 0 632 00002 0 and 00003 0  
Volume two: Communication  
Blackwell Scientific, £15.00 and £7.50  
ISBN 0 632 00003 9 and 00004 9  
Volume three: Genes, Development and Learning  
Blackwell Scientific, £15.00 and £7.50  
ISBN 0 632 00004 7 and 00005 7

The beauty, variety and often bizarre nature of animal behaviour rarely fails to fascinate the beholder. But why do animals behave in the ways that they do? This question has been the source of endless speculation and scientific investigation.

In the introduction to this new series the editors focus on Niko Tinbergen's conclusion that there are four ways to look at this question. We can ask what factors moulded the behaviour of animals' ancestors into its present form. Did baboons, for example, come to live in large groups because small groups or isolated individuals were subject to greater predation? We could also seek to discover a behaviour's present function or functions. Is group living still adaptive for baboons, or to give another example, what maintains monogamy in many of our common temperate birds? Are individuals that deviate from monogamy at a disadvantage?

The editors argue that this evolutionary approach has been well aired in recent animal behaviour texts on sociobiology or evolutionary ecology. They therefore aim to balance this trend with an integrated approach, while concentrating on Tinbergen's two remaining types of answer. Instead of looking for evolutionary answers, we can investigate the stimuli and mechanisms immediately behind the current behaviour with studies of sensory physiology, coordination and motivation. What, for example, goes on within an animal to cause it to seek food and how is searching controlled?

Finally, there remain questions concerned with the development of behaviour during the life of an individual. Perhaps an animal behaves in the way it does because of some particular train of events during maturation. What, for instance, is the role of learning? Do some animals have a largely pre-programmed capacity to behave. Whereas others rely on a complex interaction between learning and inherited predispositions? Why do different species have contrasting abilities to learn different tasks?

It is certainly true that studies of causation and development have been overshadowed in recent texts and research. Quite simply, studies of evolutionary ecology and sociobiology have become fashionable. The scientific study of animal behaviour, however, needs all the skills it can muster whether they be from comparative psychology, ethology, evolution, ecology or genetics. This new series will certainly help teachers and students who have followed the sociobiological flock, to return to the fold.

Each of the first three volumes in the series, which is aimed at advanced undergraduates, includes an introduction by the editors and five or six chapters written by specialists, each of which is fully referenced and ends with a useful brief note about further reading. The standard of writing and presentation is high and the individual contributions have been effectively unified by the editors to produce three cohesive volumes.

To be a successful observer of behaviour it is essential to understand how other species perceive their world. *Causes and Effects* discusses this and uses some unusual examples, such as magnetic bacteria and route planning by jumping spiders, to show how sensory information guides behaviour. Insight is also provided into how the nervous system and peripheral feedback govern the organization of motor patterns. One motivational problem concerns how animals resolve the pressures to behave in conflicting ways, and a bare attempt is made to sort out the terms used to place the consequent switches in behaviour.

However, the examples mainly involve eating and drinking, which are relatively easy to manipulate, and some readers will be disappointed to find that conflicts involving social behaviours are not treated with equal rigour.

Communication provides a good introduction to the topic, and covers some useful topics often not included in introductory texts. For example, there is a discussion of the statistical methods used to analyse sequences of behaviour, a vital step in many studies of communication. One chapter deals in an admirably balanced way with adaptations for efficient communication, the manipulation of the recipient by the signaller and whether signallers act in a deceitful way. As attention has recently been directed at the adaptive nature of communication between rivals these topics have been the subject of much debate. For instance, should one expect a displaying bird to signal its probability of retreat, if this information is to the advantage of a rival, or would bluffing be more advantageous? This chapter is certainly the place to start to catch up with these issues.

Although the chapter headings in *Genes, Development and Learning* may sound familiar to those acquainted with existing texts, the same may not be true of their contents. Moving on from the obvious starting point (that development involves interaction between genes and environment), this volume discusses areas in which important progress is being made. A wide variety of examples are used and full attention is given to theoretical developments. New techniques, such as using single-gene mutations which affect the nervous system, have improved our understanding of how genes affect development. Other progress is more dependent on changes in attitude than in technology. For example, it is emphasized that learning must be considered a biological adaptation and that differences in the learning abilities between species can only be understood in relation to their ecology and life history. How extraordinary that we had to wait until the 1970s to see this union of learning theory and ethology?

I expect this series to become essential reading for undergraduate courses in animal behaviour.

John Deag

John Deag is lecturer in zoology at the University of Edinburgh.

Cambridge University Press have revised the 1947 edition of David Lack's *Darwin's Finches*, with an introduction and notes by Laurence M. Ratcliffe and Peter T. Børg. The book is available at £19.50 and £7.95.

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## BOOKS

### EDUCATION

#### Put to the test

**Monitoring Children: an evaluation of the Assessment of Performance Unit** by Caroline Gipps and Harvey Goldstein  
Heinemann Educational, £14.50  
ISBN 0 435 80345 X

**Testing Children: standardized testing in local education authorities and schools** by Caroline Gipps, Stephen Steadman, Tess Blackstone and Barry Siferer  
Heinemann Educational, £14.50  
ISBN 0 435 82323 X

The Assessment of Performance Unit (APU) is an institution with as many identities as there are factions within the world of education. For some it is a cynical attempt to reinstate testing and the central control of the curriculum; for others it is a sensible monitoring device, checking up on the health of the education system; for others it is an opportunity to broaden the curriculum and produce a new impetus for an improved education. Yet many people outside education will not have heard of it and many teachers are uncertain about what it is supposed to do and what it has accomplished.

The APU is a unit within the DES. It was set up in 1974 to oversee the surveying of performance in a number of curriculum areas. It is currently monitoring performance in maths and English language, sciences and shortly a foreign language. Technology and aesthetics are being considered as possible additions. It is headed by an

HMI and reports through the Permanent Secretary to Ministers at the DES, but the testing is carried out under contract by the National Foundation for Educational Research and some universities.

These two books stem from a three-year evaluation study (1979-82) of the APU and local authority testing. They constitute the most up-to-date and concentrated source of information on these issues, yet they leave the reader with a number of important questions unsettled. Some of these stem from the uncertain relationship between the two books and the technical quality of their production, others from the nature of the evaluation that they report. In short, both books read like research reports produced for an "insider" audience and only partially rethought for presentation to a wider audience. In this respect the volume on local authority testing is more successful. Despite these failings, both constitute essential reading for teachers and educationalists interested in the wider effects of the APU monitoring and local authority testing.

The book by Caroline Gipps and Harvey Goldstein, *Monitoring Children: an evaluation of the Assessment of Performance Unit* resulted directly from research funded by the SSRC after a seminar on accountability held at the Institute of Education. The research does not belong to an easily identifiable genre of social science research. The researchers conducted interviews and examined the internal minutes and files of the APU. However, the use they make of the interviews is most unclear: "We do not refer directly to anyone interviewed". The people interviewed are listed in an appendix but their connection with the APU is not indicated. To add to this confusion people are reported in a strangely depersonalized way: "a member of the DES argued...", "The DES observer points out...", "The professional head of the Unit said...", "Was the 'member' the same as the 'observer'?", was he reported in the minutes or was this an unquoted

account from an interview? The status of the material is often unclear and in this report is unsatisfactory. At one point the authors describe their evaluation study as "an elucidation of the APU and as such an historical account, though we do offer an assessment and critique of the work". The book is therefore an account of the major elements that make up the APU and a selection of issues that the authors feel are the most important ones. However, the authors' perspective is not entirely that of the "outsider". Harry Goldstein served as a member of the Statistics Advisory Group and fought an important and perhaps decisive battle with NFER experts over the status of the Rasch model. This is a mathematical model that would, it was hoped, enable the banking of test items so that teachers or testers could construct tests from items of known difficulty. However, it is based on rigorous assumptions about the unchanging difficulty of items and the nature of ability in children that have come under much criticism.

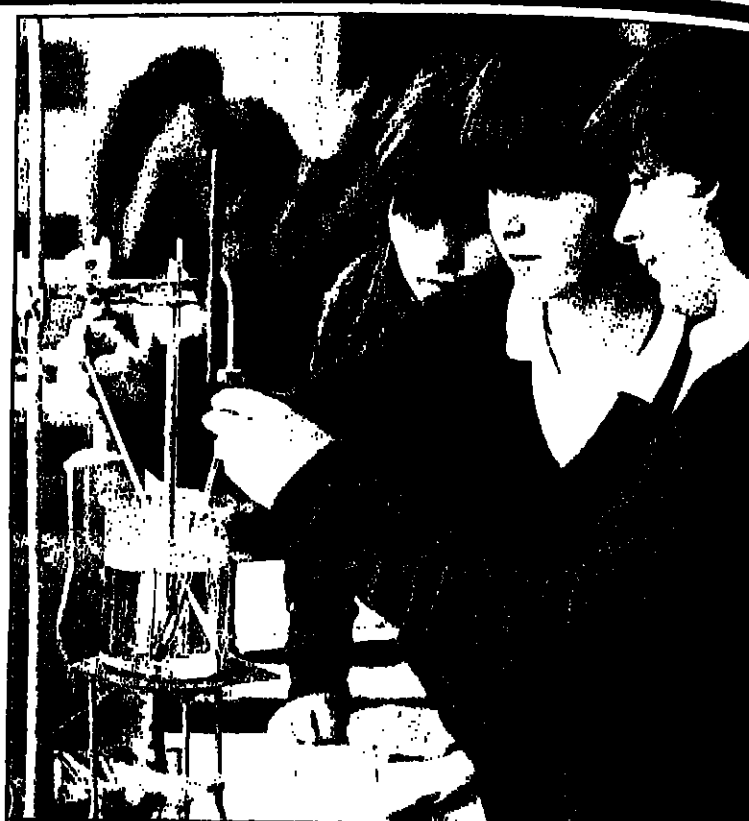
The defeat of the NFER on this issue meant that much of the technical and academic legitimization for a co-ordinated system of national monitoring and local diagnostic testing was lost. As a consequence the impetus behind the monitoring system envisaged in the early days has been lost and the system has fallen more under the control of local authorities and teachers' unions. This is, of course, all very familiar to anyone concerned with the Schools Council and other DES initiatives to control education from the centre. Surprisingly the authors do not press this comparison and indeed argue that but for managerial expertise and better academic researchers the APU could have succeeded on issues where it failed, in particular monitoring the underachievement of ethnic minorities.

The "insider" involvement brings the book to life in parts and does an important dimension to the account but in the end it disqualifies the research as evaluation, in the normal sense of the word within educational research. Nor does the book qualify as a history of the unit. The focus remains too narrow and the institutional and political context of the APU remains unexplored. It is in this area that important questions underlying the whole exercise remain unanswered. *Testing Children* is essentially a report based on a postal survey of local education authorities; an overview survey of headteachers and five case studies of particular local authorities. Additional data were obtained from interviews with local advisers/inspectors, educational psychologists and administrators and an "update" response from local authorities. In all, it represents a rich and interesting data base on the current use of testing in local authorities which is clearly and accurately reported. It represents essential reading for those people interested in tracing some of the effects within local authorities of the accountability debates of the late 1970s and the orchestrated panic about educational standards.

The survey reveals that there has been a large increase in local authority testing. The biggest increase was in 1978, a few years after the publication of the Black Papers and Jim Callaghan's Ruskin speech on standards. Testing programmes take time to put into practice. Over 80 per cent of authorities now have testing programmes and most of these are blanket programmes, despite the effect that this could have on the curriculum and the enthusiasm at the DES for light sampling. Many local authorities come in for criticism on the technical quality of their programmes because they are unable to link their purpose for initiating the testing with the qualities of the particular tests used. Some authorities were found to be using out-of-date tests for a number of incompatible purposes.

numbers topped one thousand pupils: "the beast has changed". In an effort to resolve some of the problems that were forecast correctly to arise from such numbers, the planners of the school provided separate accommodation for the "houses" into which the school was to be divided. Burgess notes how strong the sense of territory was among staff laying claim to their separate accommodation and equipment. Such separate accommodation made for difficulties in creating a sense of community within the school. Physical separation was paralleled by the organizational division between pastoral staff with their own hierarchical staff. Burgess concludes that: "While it was evident that the pupils and teachers had been brought together in one site it was doubtful whether one school was in operation". He suggests also that the staff shared no clear and unambiguous view of what comprehensive schooling was all about. Given that the staff held a variety of views on the purpose of the school, it is perhaps understandable that the school was marked by division rather than by community.

The divided character of the school is well illustrated in the second part of the book. Here Burgess has employed the method of participant observation to provide an anthropological account of his encounters with the "Newson tribe" within the school. These were pupils named after the Newson Report (1963) on average and less than average ability children: as Burgess puts it, "pupils who were regarded as the 'less willing' and the 'less able'". Those pupils who would have been opportunities to gain success in public examinations. One cannot but respect Burgess' integrity and courage as an ethnographer when reading of his teaching of these fourth and fifth year groups within the school. However deadpan



Gipps, Steadman and Co have produced a lively, critical analysis of local authority practice. They make it clear that less time and money could be spent but more useful information could be obtained if those responsible were clearer about their objectives and the technical limitations of testing. Their book points towards the way in which this could be achieved. In addition they raise important questions within their chapter on the dilemma of testing. For example the chapter lays bare some of the grossly oversimplified assumptions about testing and standards, including the idea that testing in some way safeguards or improves standards; a refreshingly clear and critical appraisal.

Both books contribute to the debate on accountability by exploring different aspects of the early reaction to the "failing standards" hysteria of the late 1970s. It is to be hoped that by understanding this phenomenon more deeply we will be less prone to similar infections of crisis thinking in the future.

Colin Lacey

Colin Lacey is professor of education at the University of Sussex.

#### A closer look

**Experiencing Comprehensive Education: a study of Bishop McGreggor School** by Robert G. Burgess  
Methuen, £12.50 and £5.95  
ISBN 0 416 35150 6 and 35160 3

Bishop McGreggor School (pseudonym) is a Roman Catholic co-educational eleven-to-eighteen comprehensive that was planned and built in the late 1960s, and by 1973 housed 1,269 pupils. Although Burgess does not tell us why he chose this school for his ethnographic enquiry, the reason could be that it exemplified the ideal of comprehensive schooling, as in Circular 1063's description of such schools as orthodox comprehensives providing "the simplest and best solution to going comprehensive".

Burgess divides his study evenly into two parts. Part one looks at social relations in the school, and in particular, at the gulf between the more pastoral aspects of school life and the work of the teaching departments. These divisions were exacerbated by the physical planning of the school. Quite rightly, the designers of the school were concerned with the predicted numbers of pupils within the school. Comprehensive schools were always expected to be large: partly to ensure reasonable size sixth-forms, once thought (no longer) to be an essential pre-requisite for any self-respecting comprehensive. Large numbers, a policy legitimized by the headmaster, meant that the school log book at the time school

his prose, Burgess cannot altogether disguise the despair and desperation of such class encounters. Burgess had sympathy for his temporary charges: he recognizes that they were too often casually labelled as irredeemable failures: and that the facilities for their teaching were poor. But the school could scarcely cope. At most a trace was negotiated between the teachers and the taught whereby the teachers could be given a relatively easy ride if their national pupils were allowed to "mess about" and "to have a laugh". However, in a moment of insight one pupil on the Newson comment: "We can do what we like and when I can do just what I like, I don't like it."

This study is of a school in the early 1970s. To a degree this may lessen the illumination of present-day issues in education. How is Bishop McGreggor School making out now? No doubt its roll will be falling and its resources of staffing and material reduced. Will it be coping any better with the problems of teaching and controlling quite large numbers of pupils with varying needs and abilities? In defiance of one view of comprehensive schooling, Bishop McGreggor created division rather than unity. The value of case studies such as this is that they provide a wealth of detail and reported incident concerning school life to set alongside the findings of national surveys.

Burgess perhaps fails to link up the two parts of his study - he tells us little about the children who were conventionally successful. Above all, Burgess focuses our attention on the dilemmas faced by schools in attempting to teach those boys and girls for whom school is seen as a hateful prison offering nothing of any value whatsoever.

Beverley Shaw

Beverley Shaw is lecturer in education at the University of Durham.

## BOOKS

### EDUCATION

#### The power of ideas

**Universities, Society and the Future: a conference held on the 400th anniversary of the University of Edinburgh 1983** edited by Nicholas Phillipson  
Edinburgh University Press, £10.00  
ISBN 0 85224 461 4

Edinburgh University has chosen to celebrate its four hundredth anniversary in an appropriately cerebral fashion. The conference, of which this splendidly published volume is the product, ranged over the early history of university education and over some of the great nineteenth-century debates as well as discussing some of our present dilemmas. It is too often assumed - and here the University Grants Committee is the worst offender - that institutions are less important than disciplines and Edinburgh's (and Dr Phillipson's) initiative serves to remind us that institutions leave their mark more weightily on academic disciplines than vice versa and outlast them.

The book is divided into three very different parts. The first, under the misleading title of "The Early Modern University", opens with an essay by Lawrence Stone which argues that academic excellence is in some way linked with strict social, moral and intellectual control. Unfortunately, to do this he bases his argument not only on his formidable knowledge of Tudor, Stuart and eighteenth-century Oxbridge but on a rather sketchy reading of eighteenth-century Edin-

burgh and on a decidedly dyspeptic view of modern Oxbridge. The most substantial contribution in this section is by Nicholas Phillipson, who describes the influence of eighteenth and early nineteenth-century Edinburgh philosophers, Reid and Stewart, on university teaching in the United States and France. What this and James McConica's chapter on the spread of Erasmus humanism illustrate clearly is the generic power of ideas, developed through the medium of university teaching and writing, to infect and revolutionize cultural and educational attitudes.

The second section is perhaps the most interesting because it deals with the nineteenth-century debate about the role of universities as training institutions for the nation's elite, as citadels of the intellect or as a means of meeting societal and industrial needs. In particular it relates the debate to the immediate pre-Robbins period giving us pause to reflect on the extent to which, in the 1960s and 70s, DES, UGC and the universities chose to ignore many of the philosophical issues about institutional function and purpose in the scramble for student places and building programmes. As the late F. S. Lyons and Patrick Nuttgens show, the debate about liberal education and applied science and the different approaches to equipping the young with the tools of the workaday world is as relevant to the present "Great Debate" as to the universities of the nineteenth century.

The final section takes us into the present and the future, and here the social scientists hold sway over the historians. It begins with a thoughtful and critical view by Harold Silver of universities as institutions cut off from the rest of higher education and from the interests of their own students. And it reaches a high point with a magisterial survey of the financial issues confronting higher education by a superb analyst, Dr Gareth Williams. But as Peter Scott says in his conclusion the Leverhulme recommendations failed to catch fire in the conference discussion. Perhaps this

was particularly because they seem cut off from the past and to be more concerned with the mechanics of the operation of the system that we now have than with relating the system back to its intellectual roots in the Victorian and Edwardian periods. This is not to deny a place, and indeed an important place, for writing on such themes, but the contrast between the first two sections and the third is very striking. The third section looks only too much like the answers that one much to the first and second sections of this stimulating book.

Michael Shattock

Michael Shattock is registrar at the University of Warwick.

#### A touch of genius

**Red Robert: a life of Robert Birley** by Arthur Heenredon  
Hamish Hamilton, £9.95  
ISBN 0 241 11158 7

Robert Birley (1903-82), schoolmaster and headmaster extraordinary, would almost certainly have failed a PGCE course. He was frequently late for his lessons, often by as much as 16 minutes. He would talk non-stop for an entire lesson, which might go on long past its timetabled end.

As an administrator he was something of a shambles, and both his headshakes were a tribute to the patience of his staff. A routine inquiry to him might receive a rambling and indecisive 12-page handwritten reply, while an urgent memo might get no answer at all. Later, anti-apartheid

South Africans whom he befriended and encouraged to write to him were baffled and hurt when they, too, got this kind of treatment.

Yet Birley was barely 30 the first time he was considered, as a serious internal candidate, for the headship of Eton, for which his powerful supporters included Alington, the outgoing head. Two years later he landed Charterhouse - the first historian to head a top-rank public school - where he was rated a success. From here he was invited in 1947 to become educational adviser in the British zone of Germany, at a grade equivalent to Major-General. It was not long before the objective of de-nazification gave way to the more urgent concern to hold the line against the Russian blockade, and his proposals for university reform sank without trace.

Recalled to head Eton, he at first saw this post as an opportunity to become the eminence grise of national educational policy, though nothing like that was ever to happen. A gentlemanly liberal which took the form of practical concern for the Slough unemployed before the war, and after it, a courteous invitation to the local Labour MP to address the boys, earned him, absurdly, the nickname "Red Robert". Twice a candidate for the Mastership of Balliol, he was rejected as being too conservative. Improvably, he became professor of education at Johannesburg's Witwatersrand University on his return from Eton, and it was in that role (for which he was given his grudging and belated knighthood) that he did some of his best work. Neither his Reith Lectures nor his Chair of Humanities at the new City University in 1967 left any considerable mark.

What, then, was the nature of Birley's genius? For a touch of genius he undoubtedly had. As his Oxford examiners rightly divined, he was an alpha-delta man. Though its sources are inadequately indicated, this well-written and highly readable biography brings out well Birley's greatness as a teacher and inspirer of others: he infected them with his own excite-



Robert Birley

ment, imaginativeness, and passion. Having failed or dodged most exams throughout his own school career, he knew to look below the surface for real potential, as the careers of William Rees-Mogg and many others show. (Whether that verdict covers Guy Burgess can be disputed.) Lacking a capacity for small-talk or the obvious arts of public relations, he led by civilized example and by his gift for friendship. With much support from his wife, he developed a flair for creating an atmosphere in which others - even the humblest new boy - would flourish and give of their best. It must surely be a judgment on our schools, universities and polytechnics that Birley's Law - "the larger the School to be administered, the more the Head should teach" - is so laughably impracticable.

John Honey

John Honey is professor of education at Leicester Polytechnic.

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Christine Bolt

Christine Bolt is reader in American history at the University of Kent.



# BOOKS

EDUCATION

## Academic expansion

**The Transformation of Higher Learning 1860-1930**  
edited by Konrad H. Jarausch  
University of Chicago Press, £24.00  
ISBN 0 226 39367 4

The period of the universities' history that has just ended - from the 1860s to the 1930s - seems to all who were involved in it to have been one in which the higher education structures of most countries have been transformed, with many new institutions created and the older ones greatly and rapidly increased in size. The period covered by this book, however, though rarely one of such rapid change, saw a far more important transformation.

It was, to a varying extent from one country to another, the period in which the universities changed from institutions providing what was sometimes an indifferent education, mainly in the liberal arts, for a tiny white elite, to the basic shape of the modern university system, offering to a far larger fraction of the population, drawn from a wider

range of social classes, and including women, virtually the whole range of what we now regard as university subjects. It was also a period in which, in all countries, the state became increasingly involved.

In his contribution to this volume, Harold Perkin sums up much of this change by saying that it would have made almost no difference to English society if the universities had disappeared in 1850; but if they had disappeared in 1930 that would have inflicted an immense loss on society and industry.

This symposium volume tries to cover the changes during the period 1860 to 1930 in four countries: England, Germany, Russia and the USA. It divides its subject matter into four sections: the dynamics of expansion; the diversification of institutions; the opening of recruitment; and "the process of professionalization". Each section has a chapter on each country, and each contribution has a different author, so there are 16 contributors, mainly from the USA, and, with the editor's introduction, 17 chapters.

The editor does not make it entirely clear how these four countries came to be chosen as the subject of the conference whose papers form the chapters of this book. Perhaps it was because of wide differences between them. The USA, for example, entered the period with many universities, but England with only four or five. Governments took little part in the running or control of higher education in England or the USA, but played a substantial part in a Germany that was already dominated by Prussia, and kept a tight



Peasant university in Petrograd in 1918

control on the whole educational system in Russia.

One wonders also why England is covered but not Scotland, where the universities were very different. But it is probably useless to look for an explanation of this, as the editor seems unaware that Scotland exists. He gives figures for the number of universities in England while referring to them as the British universities, which is not a trivial point when England had, depending on one's definition, some four or five universities, but Britain had some eight to eleven. He also thinks that data on the social composition of the student body in Oxford in the middle of the last century are applicable to the students of all universities.

For the British reader with some knowledge of the history of higher education in the English-speaking world but more sketchy knowledge of other countries, much of the interest of this book centres on the chapters dealing with Russia. These include in their source material the files of the tsarist secret police, whose diligent studies of the students must make them among the earliest researchers in the field of higher education.

In Russia, at the outset of the period, the universities were reserved for an elite chosen not for its wealth but by its membership of the aristocracy. Then, as the country went through phases of liberalization and repression, the universities were first opened

up to the children of the wealthier merchants and farmers, even to those of manual workers and Jews, and then attempts were made to restrict entry, imposing quotas of Jews and making it difficult for the lower classes to enter those higher parts of the school system from which it was easiest to go on to gain a degree.

By 1914 Russia showed some surprising contrasts. Women made up a higher proportion of the students than anywhere else, and Moscow was the third largest university in the world, while the population as a whole had almost the highest literacy rate in Europe. After the revolution, the universities were broken up into separate institutes covering specific, mainly professional, fields; but the basic purpose remained the same - the perpetuation of a ruling elite.

In any symposium volume the treatment of the subject matter is bound to be variable and patchy. Some chapters take a wide sweep, eschewing detail, while others rest their arguments on a careful analysis of the backgrounds of a dozen or so students. Some are eminently readable. Others are not. Why, I wonder, are most of the German chapters peculiarly and, thirdly again as long as the English chapters, and full of those trendy tables whose comprehension requires psychic powers? Nevertheless, the discerning and discriminating reader will find much of value here.

Ernest Rudd

Ernest Rudd is reader in higher education studies at the University of Essex.

## Handling a class

**Classroom Teaching Skills: the research findings of the Teacher Education Project**

edited by E. C. Wragg  
Croom Helm, £15.95 and £7.95  
ISBN 0 7099 2756 8 and 2757 6  
Effective Classroom Management: a teacher's guide  
by Robert L. Laffett and Colin Smith  
Croom Helm, £11.95 and £5.95  
ISBN 0 7099 1627 2 and 1628 0

*Classroom Teaching Skills* reports the research findings of the Teacher Education Project, a four-and-a-half year DES-funded investigation by researchers at the Universities of Exeter, Nottingham and Leicester into the development of classroom skills in young secondary school teachers and student teachers.

The first and perhaps most crucial area covered is that of class management, and here we are given the reassuring news that in the sample of 204 student lessons observed during the project most of the deviant acts

carried out by children were minor in nature and were usually terminated simply by teacher request or reprimand. More reassuringly still, there were no acts of physical violence towards student teachers. Children, it seems, are more cooperative than we sometimes think. Third and fourth formers, predictably, showed most deviant acts, and particular trouble spots were the transitions from one lesson or from one activity to another. Equally predictably, students emerged as less certain about their classroom rules and aspirations than qualified teachers, less business-like, less warm and friendly, less deliberate about learning children's names, but more likely nevertheless to identify with them.

From the pupils' point of view, an important finding was that the first impressions made by a teacher upon a class are vital. Pupils appear to expect and respond to a firm start in a new teacher, but where teacher authority is not tempered by humanity the chances of developing a positive working relationship subsequently are diminished. Teachers successful at creating such a relationship tend to be those who are quick to work alongside a child after needing to reprimand him, and are careful to win support for their methods before expecting children to take part in decision-making.

When it comes to the art of classroom questioning, both students and young teachers show room for improvement. Student questions suffer from lack of clarity, from inappropriate levels of difficulty, from defects in delivery, and from failure to meet the child's eye when questioning him, while teachers ask a preponderance of factual questions at the expense of open ones. Within the broader context of lesson content, both students and teachers do best if their lessons make a variety of stimulating cognitive demands, have a well-defined and appropriate structure, and add to existing pupil knowledge. A question mark is posed over mixed ability classes though. Such classes may have social advantages, but in practice they appear to produce from teachers undifferentiated work which fails to take account of individual pupil needs, and which therefore handicaps both quicker and slower learners.

No major surprises in any of these

findings perhaps, but it is good to have our theories confirmed by such meticulous and carefully-oriented research, carrying implications through-out for the way in which we train teachers. The book also has helpful appendices which give the research instruments used in the project, and thoughtful introductory and concluding chapters by Professor Wragg on the nature of teaching skills and on the training of skilful teachers respectively. When I add that overall the book is a model of how to present educational research in a clear and lively way, you see why it is going to appeal to educators and students at all levels.

*Effective Classroom Management* is a less ambitious work, with the aim not of presenting research findings but of offering simple straightforward advice on how to run an effective class. There are short chapters on such things as classroom confrontation, rewards and punishments, and the basic "rules" of classroom management. Only those who blanch at the presentation of

didactic statements without the support at every turn of a welter of references to other people's research will take exception to any of the main points raised. A read through the book's 119 pages should help young teachers avoid many of the elementary mistakes in handling a class which once made, tend to dog their efforts throughout the first year of their professional lives.

In short, it's a good week that turns up two such practical and readable books. Neither pretends to deal with individual differences or with the causes of problem behaviours, so the emphasis is organizational rather than psychological. But within the limits imposed by this emphasis, both books are highly recommended.

David Fontana

Dr Fontana is senior lecturer in educational psychology at University College, Cardiff.

## Off with the head

**Beyond Domination: an essay in the political philosophy of education**  
by Patricia White  
Routledge & Kegan Paul, £11.95  
ISBN 0 7100 9765 4

In her introduction Pat White observes that a book entitled *Beyond Domination* might be thought to belong to the growing body of Marxist writings on education. Although "unashamedly radical" in its central claims and containing expressions of sympathy for some Marxist criticisms of capitalist society, she presents her book as standing firmly in the liberal-democratic tradition. This tradition still has radical blood in its veins, and drawing on the ideas of such writers as Dworkin, Ackerman, Gutmann and others, White constructs an argument which, though liberal in its inspiration, is far from being "an ideological prop to the status quo".

White is committed to participatory democracy and the purpose of the book is to explore some of the practical implications of this commitment for education. She is not afraid to abandon the "outpost" of much recent philosophy of education and join the small but growing band of contributors to the subject who are keen to clothe their philosophical conclusions with practical implications. In the present case, White's (political-philosophical) principles are made to bear on the questions of political education in schools, the role of the head teacher and of the educational rights and duties of parents.

democracy is made out in chapter one. Here White sets herself the task of making explicit "the bedrock of principles and assumptions underlying democracy in my society" (her emphasis). The implication apparently being that democratic conclusions can only be derived from one unique set of premises. The particular premises from which she starts are the concept of a person as a chooser and an "agnosticism" about what constitutes the good life. This agnosticism presumably derives from the assumption (not argued for in the book) that judgments about what constitutes the good life are irredeemably subjective - hence her claim that there are no "experts" in this field.

This agnosticism is taken to imply that "the only authority on the good life is... the individual himself or herself who has a chance to reflect on possible lives". The practical consequence of this is held to be a commitment to equality in the distribution of power so that all choosers have a fair opportunity of realizing their own conceptions of the good life. This equality of power further implies a strong presumption in favour of participatory democracy.

White then explores some of the institutional and ethical implications of realizing democracy as she conceives it. A presumptive commitment to participatory democracy implies the maximum devolution of managerial decision-making within a framework of basic rights. A specific implication of this, for example, is that the claims of employees and the balanced in a system or worker co-operatives coupled with a system of community coordination.

Such a political philosophy must, of course, have educational implications. First, if participatory democracy is to

be a reality, political education must become one of the central features of schooling - rather than, at the moment, a contentious optional extra. But it must be conceived broadly - not only so as to exclude indoctrination but so as to include some experience of collective decision-making on the part of the pupils. Second, given this political philosophy, the position of the idealistic head becomes untenable. Ideally, the conventional head should be abolished, in the interim, heads should be encouraged to adopt an increasingly "democratic" conception of their role. Parental rights are conceived, too, in relation to parents' duties as citizens.

The great merit of Pat White's controversial and highly discussable book is that it presents education as a central topic for political philosophy. But many of its theses (both explicit and implicit) require further debate. It is obvious as White asserts that judgments about what constitutes the good life are subjective? Must liberal democracy presuppose that they are? Is the notion of choosing the good life as unproblematic as White assumes?

At the level of practical implications, we find that White has little to say about the kind of national assembly required by her theory of democracy (why no mention of proportionate representation?). And, at the level of practicability (for practical implications are not necessarily practicable) the democratization of the school (let alone other work-places) conceivable on any scale prior to the transformation of the economy?

Grenville Wall

Grenville Wall is principal lecturer in philosophy and head of the school of philosophy and religious studies at Middlesex Polytechnic.

# BOOKS

EDUCATION

## Humane learning

**The Libertarians and Education**  
by Michael P. Smith  
Allen & Unwin, £12.00 and £4.95  
ISBN 0 04 370139 6 and 370140 X

Libertarianism is a long and honourable tradition in educational thought. This book is concerned with it both as an educational position - "an attitude or stance which recurs" - and as an educational movement. It also attempts to distinguish the two wings - those who "tend to be more interested in non-coercive pedagogy" and those who "tend to be more interested in an education which does not leave the individual politically helpless".

In recounts the early history of libertarian thought and practice, with William Godwin's setting of the elemental themes, later to recur again and again - the right of the child to a certain autonomy, the notion that the teacher should follow the learner, and the conviction that state education is, inevitably, state propaganda. The early experiments have qualities to fascinate, to challenge and to charm. Tolstoy raised a fundamental question about compulsory, state education at a time when it had been established in Prussia but was not yet established in England: What is popular education so unpopular? and why does it become a police matter? He sought an alternative in practice, at the free school he set up in 1862 on his own estate at Yasnyaya Polyana, in Tula Province. Others later set up schools with names like "the Beehive School" and "the School of the Future".

Many of the early experiments tended, like the free schools of the 1960s and 1970s, to be the personal statements of strong-willed individuals, idealistic and short-lived. Francisco Ferrer's search for an education which was "non-clerical, non-coercive, and up-to-date in terms of curriculum and premises on the child's rationality and autonomy" led him to be driven into 16 years of exile, and later, when he returned to his native Spain, caused his school to be closed and him to be shot.

Libertarian education was very much a reaction against the modern state - industrial, urban, bureaucratic and large-scale. In contrast, libertarians praised handicrafts, such as carpentry, asserted rural virtues, stressed personal relationships, and held that that small was beautiful. Michael P. Smith does well to remind us that, in France, there was a libertarian tradition which was socialist. However, from Godwin, through A. S. Neill and to Paul Goodman and Ivan Illich, individualism has dominated the tradition.

The book recounts and analyses the revival of libertarian ideas in the 1960s - with free schools and community projects - and the writings of Goodman, Holt and Ivan Illich. The author notes that the free schools had the makings of small-scale, cheap and efficient organization, and had accountability to students, parents, and citizens built into them. In his view Ivan Illich was politically naive and open to the charge of utopianism (which was made by many commentators, including Sidney Hook). He observes that in England free schools hardly exist any more, and that the most notable and successful free school - the White Lion Street School in Islington - "has just been taken under the wing of the Inner London Education Authority". The steam has gone out of the deschooling movement.

Michael P. Smith seeks to identify the main features of libertarian education, and the book contains useful summaries of the ideas of Goodman and Paul Goodman, among others. He also seeks to distinguish between libertarian education and progressive education: "Libertarian education is not just progressive education writ extreme. It has a consistent social and political reference which progressive education typically lacks." He also analyses some of the weaknesses and strengths of the libertarian tradition. The weaknesses include basing so much on an alternative theology (the child born in a state



A. S. Neill

of original curiosity and activity, instead of in a state of original ignorance and indolence) and the facile assertions about "natural" learning. The strengths include the search for alternative forms of teaching and learning; for an education which was integral and which encouraged the acquisition of practical skills (both the conventional school and the Manpower Services Commission need to pay attention there); and for an education which, as a process, was both humane and humanizing. One of the great insights from Rousseau (a paradoxical mixture of libertarian and totalitarian tendencies) to Paul Goodman and Colin Ward - was to see the possibilities of the environment as an educator. The notion that education should be liberating is itself important (and justifies the inclusion of Paulo Freire - a liberator rather than a libertarian - in the book).

The libertarian tradition in education has influenced the reform of primary education; the private progressive schools; and the community education movement. It has not itself been "a movement" because, with its extremes of individualism and localism, fragmentation was built into it. The tradition still has a lot to say to those who are engaged in the current reconstruction of education.

Ian Lister

Ian Lister is professor of education at the University of York.

## Hobby horses

**Sacred Cows in Education: essays in reassessment**  
edited by Frank Coffield and Richard Goodings  
Edinburgh University Press, £10.00  
ISBN 0 85224 484 3

This volume of essays by members of the school of education at the University of Durham has been completed to celebrate two events, the one hundred and fiftieth anniversary of the founding of the university and the sixtieth anniversary of the teaching of education within it.

The editors, Professor Coffield and Mr Goodings, state that they have tried to analyse afresh some of the traditional assumptions of education to see how far they are still valid, and re-examine some trends and developments to ascertain to what extent they have fulfilled the intentions and expectations of their origins. They have aimed at a common approach which gives unity to the book, encapsulated in the title "sacred cows"; however it is not suggested that these should be slaughtered, but rather retrained, redirected and returned to their former usefulness.

The contributory articles are organized into four main sections covering such topics as theory and practice in

the curriculum, moral and religious issues, language, and wider social and economic questions such as racial and sexual inequalities and the school's response to youth unemployment. The questions posed include the following: How adequate are current theories of knowledge and of work in language? Whatever happened to curriculum research? How free is the teacher in England? Is moral relativism tenable? Is a pluralistic society necessarily to be deplored? How useful has the Bullock Report ("the sacred Bullock" naturally) been? Are modern languages useful? Do we take teaching about Europe seriously? Are girls best benefited by being treated the same as boys? What is the evidence for the belief that West Indian children excel at sport? Has secondary education been achieved for all? How are schools to respond to the crisis of youth unemployment?

The result is an oddly unsatisfactory volume, although the quality of many individual contributions is high. Despite the editors' explanation, there is no underlying unity of purpose or treatment. It is not a commemorative *festschrift*, a collection of landmarks in the study of education at Durham; it offers no general reflection on how sacred cows come to achieve their privileged status; nor do the editors discuss any of the issues or difficulties which make themselves manifest when reading several essays consecutively. It is not clear for which audience the book is intended; there is not enough to satisfy the academic specialist in any one field, but its coverage is not sufficiently comprehensive for a BED student's guide to current controversies in education; and the practitioner will find some essays much less accessible than others. While some contributions would not be out of place in a learned journal, others, especially more of informal conference discussion in the bar; knowledgeable, lively, trenchant, entertaining but less than complete.

While there is always scope for reassessment in educational theory and practice, it is an exaggeration to refer to the subjects of reassessment in this volume as sacred cows in the sense of institutions or principles held to be immune from criticism or modification. A more appropriate term for some of them might be hobby-horse (William B. Thompson on "European studies or education about Europe") or Aunt Sally (Goodings on teacher freedom, which takes little account of the accountability debate). The clearest wisdom comes into being and achieves a dominant influence, with critics perceived as isolated individuals swimming against the tide, is found in Terry Brown's fair and judicious appraisal of the Bullock Report; while Ian Rodger similarly traces various approaches to curriculum research, and indicates the basis (compounded from accountability, professional development and self evaluation) on which it might more profitably develop, without suggesting that it had become over-reliant on an obsolete dogma.

Even a sacred cow may carry the horns of a dilemma, as the contributions devoted to moral education in general and diversity in particular bear out. Philip R. May (the teaching of moral values) and David Day (Agreeing to Differ: the logic of pluralism) cover much of the same ground and occasionally trip over each other's feet; tolerance cannot be absolute, there are moral imperatives, teachers must give a lead, the acceptance of pluralism depends on a shared consensus of the elements of which can be identified, but how compatible is tolerance of diversity with the implications of providing effectively for the claims of particular groups, whether girls in secondary school or West Indians on the sportsfield? And how far should education be relevant, in preparing for the world as it is, or as it should be?

Here we have the material for a great debate on a substantial issue, which must unfortunately be conducted without the benefit of editorial reflection: similarly, one might have hoped that the implications of all the essays dealing with the theory and the teaching of language would be expounded. So the book does not hang together, and its collective value is rather less than that of its parts; the opportunity for two major reassessments has been missed.

D. A. Howell

Dr Howell is senior lecturer in educational administration at the University of London Institute of Education.

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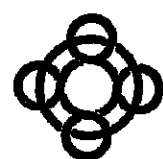
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(w.e.f. 1st September, 1984)

ENGLISH LANGUAGE The person appointed will share responsibility for the development and teaching of courses in Language Study to Honours Degree level. Undergraduate courses include: Language, Power Politics and Sexuality; English in its Social Context; The Historical Development of English, Stylistics, and Modern Linguistic Theory. We are looking for a person with energy, initiative and ideas, who can help to build up this area of the Department's work. Applicants should have research experience, preferably in either sociolinguistics or literary stylistics, a commitment to an interdisciplinary perspective, and preferably some experience of teaching in higher education.

MARKETING A graduate in Business Studies or Economics, preferably with business experience and a higher degree in Marketing, is required to assist in the teaching of second and third year courses at undergraduate level on Business Studies degree.

PSYCHOLOGY (Two Posts) 1. To teach undergraduate introductory courses in Psychology and to supervise third year research projects. Applicants must have a good knowledge of general Psychology and be familiar with SPSS. The introductory courses include research methods and areas of cognitive and personal-social development. The post also includes supervision of third year research projects.

2. To contribute to personality and counselling components of both undergraduate and postgraduate courses and to teach research methods. Applicants must have a good knowledge of the field of human personality. Familiarity with SPSS is also essential.

Applicants for both posts must have a good first degree in Psychology and must have completed, or be near to completing a higher degree. Some teaching experience would be preferred.

TEXTILE STUDIES This post is in the Home Economics Department. Applicants should possess degree qualifications in an area appropriate to this specialism in Home Economics. Higher qualifications and industrial or teaching experience in garment construction, textile science and/or creative textiles are also expected.

Salary (L1/S1 scale) £7,215-£13,443 plus London Allowance £987 per annum.

Application forms and further particulars may be obtained by writing to:

R. A. Fennell  
Assistant Secretary  
Roehampton Institute of Higher Education  
Digby Stuart College  
Roehampton Lane, London SW15 5PH

Indicating clearly the post(s) for which details are required. The closing date for all applications is Monday, 2nd April, 1984.

(1432)

The College of Ripon  
and York St. JohnLECTURER GRADE II  
(PRIMARY  
EDUCATION)

£7,215 - £11,568 (under review)

Well qualified teachers with recent experience of teaching in primary schools are invited to apply for the above post in this Church of England College of Higher Education. The successful candidate will make a major contribution to the development of the college's primary curriculum with an emphasis on the teaching of English, Mathematics and Science. The post is based on the York campus but some teaching will be expected at the Ripon campus.

Further details and application forms may be obtained from the Principal, College of Ripon and York St. John, 100, York St. John, York YO1 1JL, to whom completed applications should be submitted by 1st April 1984.

The post is based on the York campus but some teaching will be expected at the Ripon campus.

Further details and application forms may be obtained from the Principal, College of Ripon and York St. John, 100, York St. John, York YO1 1JL, to whom completed applications should be submitted by 1st April 1984.

The post is based on the York campus but some teaching will be expected at the Ripon campus.

Christ Church College  
of Higher Education  
Canterbury

Required for the beginning of the Autumn term 1984

LECTURER IN  
ART HISTORY

with experience of teaching in schools.

The college has an appointment of a Lecturer in Art History and is seeking an experienced and enthusiastic person to fill this post.

Salary scale: Lecturer £7,215-£11,568 p.a.

For further details write to Mrs Joan Long, Lecturer in Art History, Christ Church College, Canterbury, Kent CT1 1JL, enclosing a stamped addressed envelope. The closing date for applications is 1st March 1984.

Colleges of Higher  
Education continuedThe Suffolk College of  
Higher and Further  
Education

Required for 1 May 1984 or as soon as possible thereafter

LECTURER II IN  
TELEVISION AND  
FILM GRAPHICS

Post No. 4.50

mainly to teach on the Higher National Diploma (HND) course in Visual Communications. Relevant qualifications and substantial experience required.

Required for 1 September 1984

LECTURER II IN  
FINANCE AND  
ACCOUNTING

Post No. 4.33

to teach a range of financial subjects, including Auditing. Applicants should be Certified Accountants with relevant industrial/commercial experience.

LECTURER II IN  
ACCOUNTANCY

Post No. 4.48

to teach a range of general accounting subjects including Financial Accounting. Applicants should possess an appropriate qualification and relevant public sector experience.

LECTURER II IN  
LAW

Post No. 4.61

to teach legal subjects on a wide range of business and professional courses including Legal Executive. Applicants should have a law degree and/or solicitor or barrister.

LECTURER II IN  
LAW

Post No. 4.62

mainly to teach the legal content of BTEC National level courses in Business Studies and Public Administration. Applicants should hold similar qualifications to those stated for post 4.61.

Further details and application forms may be obtained from the Principal, Suffolk College of Higher Education, 100, Suffolk Street, Ipswich, Suffolk IP1 1JL, to whom completed applications should be submitted by 1st April 1984.

The post is based on the Suffolk campus but some teaching will be expected at the Ipswich campus.

Further details and application forms may be obtained from the Principal, Suffolk College of Higher Education, 100, Suffolk Street, Ipswich, Suffolk IP1 1JL, to whom completed applications should be submitted by 1st April 1984.

## Fellows

University of Dundee  
Department of BiochemistryTEACHING FELLOW  
IN BIOCHEMISTRY

Applications are invited for a two-year Teaching Fellowship in the Department of Biochemistry, commencing in September 1984.

The Fellow will be responsible for the teaching of Biochemistry to students on the BSc (Hons) Biochemistry course and could additionally take a special interest in the teaching of one or more of the following subjects: Enzymology, Metabolism, and the structure and function of biological macromolecules.

The successful candidate will make a major contribution to the development of the Department's Biochemistry course and will be expected to take an active part in the development of the Department's research programme.

The post is based on the Dundee campus but some teaching will be expected at the Perth campus.

Further details and application forms may be obtained from the Principal, University of Dundee, 100, Dundee, Dundee DD1 1JL, to whom completed applications should be submitted by 1st April 1984.

The post is based on the Dundee campus but some teaching will be expected at the Perth campus.

Further details and application forms may be obtained from the Principal, University of Dundee, 100, Dundee, Dundee DD1 1JL, to whom completed applications should be submitted by 1st April 1984.

The post is based on the Dundee campus but some teaching will be expected at the Perth campus.

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HUMBERSIDE  
COLLEGE OF HIGHER  
EDUCATION

Opportunities exist at the College for new staff having appropriate qualifications and experience in

## MARKETING

Persons appointed will be required to teach at degree/diploma levels, and to engage in research and consultancy. Knowledge and experience related to Marketing in the context of design studies, food industries, or international industries will be an advantage.

Salary scale: £12,619-£13,938 (Bar) £15,744 SL £10,883-£12,552 (Bar) £13,443 LI £7,215-£11,568

Further details and application forms can be obtained from the Personnel Office, Inglemere Avenue, Hull HU8 7LU, Tel: (0482) 446608.

Closing date: 23rd March, 1984.

HUMBERSIDE  
COLLEGE  
of Higher  
Education

Awards

Historical Research  
and Publication

Applications are invited from UK graduates for an award in historical research and publication. The award is open to graduates in any subject, and is designed to encourage research and publication in the field of history.

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## Librarians

Athrofa Gogledd-dd Cymru  
The North Wales Institute  
of higher education

DEESIDE, CLWYD

## ASSISTANT LIBRARIAN

Scale 6 (£8,154-£8,712)

Applications are invited for the post of Assistant Librarian in the department of Learning Resources at The North East Wales Institute, Deeside, Clwyd. Applicants should be qualified Librarians preferably with experience in a college library or Resources Centre.

Further details and application form available from the Registrar, The North East Wales Institute, Deeside, Clwyd, Tel: Deeside 817531 Extn. 254. Closing date for receipt of applications, 23rd March, 1984.

(14317)

## Administration

## Committee of Directors of Polytechnic

POLYTECHNICS CENTRAL  
ADMISSIONS SYSTEM (PCAS)

The Committee of Directors of Polytechnics (CDP) is establishing a Polytechnics Central Admissions System, in association with the Universities Central Council on Admissions (UCCA).

## Chief Executive

Applications are now invited for the post of Chief Executive, who will be required to set up the personnel, financial and administrative supporting structure of the System. The appointee will be expected to develop close links with the polytechnics, the CDP and UCCA, and should be able to demonstrate initiative and proven administrative ability. Experience of public sector higher education would be a considerable advantage. Applicants should normally be graduates. The post will be based in Cheltenham.

Salary in the range £15,000-£17,000.

## Applications Administrator

Applications are now invited for the post of Applications Administrator, who will be required to set up the admissions procedures and to liaise with the admissions staff in the polytechnics. The appointee will also be required to build up links with schools, colleges and individuals on matters relating to applications for admission to polytechnics, and to liaise with UCCA. Familiarity with admissions procedures in higher education would be a considerable advantage. Applicants should normally be graduates. The post will be based in Cheltenham.

Salary in the range £13,000-£15,000.

Further information about both posts may be obtained from the Secretary, Committee of Polytechnics, 309 Regent Street, London W1R 7PE (Tel: 01-637 9939).

(14309)

## ASSOCIATION OF UNIVERSITY TEACHERS

Assistant  
General Secretary

The AUT is a trade union and professional association with 32,000 members representing academic, research, senior administrative and library staff in universities in the United Kingdom and is affiliated to the Trades Union Congress.

Applications are invited for a fourth Assistant General Secretary post in our Headquarters office in Notting Hill Gate. The work involves the servicing of committees, preparation of policy papers, assistance with professional and organisational activities and maintaining contact with local groups of the Association's members in United Kingdom universities, and the conduct of negotiations with certain bodies. Experience in the field of higher education and/or professional trade union would be an advantage. Salary £10,710-£16,925 according to age and experience plus London Allowance of £1,186 p.a. Removal expenses, where applicable, will be met.

Applications should be received by Monday, 2nd April, 1984.

Further details from General Secretary (AGS), Association of University Teachers, United House, 1 Pembridge Road, London W11 3JL, Tel: 01-224 4370.

(14308)

NORTHERN IRELAND  
WESTERN EDUCATION AND LIBRARY BOARD  
OMAGH ACADEMY GRAMMAR SCHOOL

## PRINCIPAL

Applications are invited for the post of Principal of Omagh Academy which becomes vacant on 1st September 1984. The School is a Co-educational Grammar School with 683 pupils in the Secondary Department and 73 in the Preparatory Department.

Further details of the School together with criteria for appointment and application forms are available (on receipt of a stamped addressed envelope) from: The Chief Officer, Western Education and Library Board, 1 Hospital Road, Omagh, Co. Tyrone BT78 0AN. Closing date for receipt of applications is Monday, 28th March 1984 (conveying disqualifications).

(14341)

The University of  
Sussex

Applications are invited from qualified men and women

TWO TEMPORARY  
POSTS IN THE  
ADMINISTRATION  
OF THE UNIVERSITY

The posts which will be full-time and for first year in the first instance starting as soon as possible on 1st September 1984, are available for persons wishing to obtain initial experience of administrative work in a university.

The posts are in the Department of Modern Languages, and the successful candidates will be responsible for the administration of the Department's French and Italian courses. The posts are in the Department of French and Italian Studies, and the successful candidates will be responsible for the administration of the Department's French and Italian courses.

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## Research & Studentships continued

### University of Leicester The Changing Structure of the Youth Labour Market RESEARCH ASSOCIATE

A Research Associate is required for the above funded research project for a period of two years, commencing 1 June 1984. The work will involve analysing long term changes in the demand for labour of young people and its effect on the economy.

Applicants should be economists with a good knowledge and experience of applied quantitative methods and computer analysis. Experience in research work related to labour markets of occupational analysis would be an advantage.

The appointment will be on the Research Grade, range 1A. Closing date for applications 4 April 1984.

### University of Surrey Department of Hotel, Catering and Tourism Management RESEARCH STUDENT IN INFORMATION TECHNOLOGY £4,500 - £5,000

A research student is required to investigate and develop a computerized information system for a hotel. The successful candidate will have an interest in systems and computers, expert in the use of computers in organizations applied to the management of hotels and the hospitality industry. The research will be carried out in the hotel's own computer system and to take the initiative in developing a computerized system to complete the study. The appointment will be initially for two years and is intended to test the prototype design experimentally within this time frame. Applicants should hold or expect to gain a good honours degree or equivalent.

Application forms and further details are available from Mr P. R. Goss, Department of Hotel, Catering and Tourism Management, University of Surrey, Guildford, Surrey GU1 3HT, or Mr J. Goss, Guildford, Surrey GU1 3HT. Closing date 30 April 1984.

## Holidays and Accommodation

### Escape to the Hebrides

We offer a range of escape to the Hebrides for all those who are looking for a holiday in the Hebrides. We offer a range of escape to the Hebrides for all those who are looking for a holiday in the Hebrides. We offer a range of escape to the Hebrides for all those who are looking for a holiday in the Hebrides.

HOME EXCHANGE: Economical and interesting UK holidays. 2 weeks for £100. 4 weeks for £180. 6 weeks for £250. 8 weeks for £320. 10 weeks for £380. 12 weeks for £450. 14 weeks for £520. 16 weeks for £580. 18 weeks for £650. 20 weeks for £720. 22 weeks for £780. 24 weeks for £850. 26 weeks for £920. 28 weeks for £980. 30 weeks for £1050. 32 weeks for £1120. 34 weeks for £1180. 36 weeks for £1250. 38 weeks for £1320. 40 weeks for £1380. 42 weeks for £1450. 44 weeks for £1520. 46 weeks for £1580. 48 weeks for £1650. 50 weeks for £1720. 52 weeks for £1780. 54 weeks for £1850. 56 weeks for £1920. 58 weeks for £1980. 60 weeks for £2050. 62 weeks for £2120. 64 weeks for £2180. 66 weeks for £2250. 68 weeks for £2320. 70 weeks for £2380. 72 weeks for £2450. 74 weeks for £2520. 76 weeks for £2580. 78 weeks for £2650. 80 weeks for £2720. 82 weeks for £2780. 84 weeks for £2850. 86 weeks for £2920. 88 weeks for £2980. 90 weeks for £3050. 92 weeks for £3120. 94 weeks for £3180. 96 weeks for £3250. 98 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